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ABSTRACT

This paper presents an analysis of early factors influencing children's growth and development and makes recommendations for federal action to insure that all children are provided with the same basic opportunity to develop to their potential. The analysis of the situation includes discussions on: (1) the importance of circumstances during early development; (2) development-fostering experience and the nature and consequences of slum rearing; (3) the new importance of competence in our society, (4) increased urbanization, (5) existing efforts to supply children with the appropriate environment, and (6) specific problems with suggestions for action and investigation. Recommendations discussed include establishing: (1) a federal office for children; (2) the priority of young children's needs in community and state governments; (3) neighborhood programs; (4) a program to pick up where Head Start leaves off; (5) federal matching of state funds for child welfare; (6) programs to train professional and subprofessional personnel to work with young children; and (7) increased federal support for research concerned with child development. (SB)

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A BILL OF RIGHTS FOR CHILDREN

The Report of the President's Task Force on Early Child Development

15 January 1967

PS 009161

A BILL OF RIGHTS FOR CHILDREN

Report of the President's Task Force on Early Child Development

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PREFACE

The main substance of this Report comes in Part I, entitled, "The Heart of the Matter."

Parts II and III contain documentation and elaborations of the Analysis and the Recommendations, respectively.

Readers interested chiefly in the Recommendations can well skip Part II and go directly from the synopsis in Part I to the elaboration of the Recommendations in Part III. A considerable portion of the relevant parts of the analysis is given as background for each recommendation. Those interested in the background of evidence and theory may read all or part of Part II as they desire. The Table of Contents provides a detailed list of the topics discussed in each part of the Report with the pages on which the discussion of each topic can be found.

Readers interested in access to the original sources of the evidence will find in Appendix I a list of references. Most of these are reviews and summaries, but they contain references to the original source of each bit of evidence described.

Urbana, Illinois
14 January 1967

J. McV. Hunt

A BILL OF RIGHTS FOR CHILDREN

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A BILL OF RIGHTS FOR CHILDREN

I. THE HEART OF THE MATTER

Our forefathers declared it to be self-evident that all men are created equal with inalienable rights to life, liberty, and the pursuit of happiness. Even admitting unequal heredity, that equality of opportunity which they presumed to be an inalienable right is a myth, for many infants and young children must develop in circumstances far less favorable than those of others.

A. Analysis

Starting Life with Unequal Opportunity

Recent investigations indicate that the circumstances during gestation, infancy, and early childhood heavily determine later child development (See Section II-A, pp. 23-28). Also, the longer any given kind of circumstances endures, the more difficult it becomes to modify the effects (See Section II-A, pp. 28-30). Few children encounter continuously those ideal circumstances that would maximize their hereditary potential for health, competence, and humanity, but the dietary, health, and social circumstances of children born to the poor are typically far more inimical to optimal development than those of children born to the well-to-do (See Section II-B, pp. 40-50).

--This year, approximately 1,000,000 of the 4,000,000 babies born will be born to women who get no medical care during their pregnancies and/or inadequate obstetrical care for delivery. Many of these will be born with damage to their brains from disorders of pregnancy which might possibly have been avoided with protein and vitamin supplements.

--This year, over 4,000,000 children under six will become physically handicapped, and over 2,000,000 will acquire chronic damage to their health from preventable accidents and diseases. A preponderant majority of these will happen to children of the poor (See II-E, pp. 59-61).

--This year, 3,000,000 children under six will be cared for in someone else's home, under group care, or left to shift for themselves for extended periods of each day because their mothers must work. Many of them will never acquire the intellectual skills and motivation required to cope with the school without help (See II-E, pp. 64-66).

--This year, 5,600,000 children under six will live in homes where the financial resources fail to meet even that minimum standard of living considered basic. Four-fifths of these children of the poor will fail to receive necessary dental and medical care (See II-E, pp. 59-61).

--Of the million youths who drop out of school this year, about 65% will come from families with incomes less than $5,000 and about 85% from families with incomes less than $7,500.

These children face a dire future. That technology which has brought America's unmatched economic prosperity has greatly reduced the employability of the unskilled. The inevitable consequences of rearing children under such damaging circumstances are an increasing proportion of unskilled people in an economy which cannot use them, increasing proportions of the gross national product going to those who cannot produce, and an increasing proportion of people alienated from the affluent mainstream of our society and living dingy, meaningless lives with little hope and ready impulses to violence.

Low Priority for Children's Needs

Parents, the poor as well as the well-to-do, cherish their babies and young children. In America's children lies her only hope for the fulfillment of her national goals. Mental development and competence are heavily determined by conditions encountered during the first three years and are largely set by age six unless the circumstances of life change radically (See Section II-A, pp. 30 ff). Equality of opportunity to develop both before and after birth is dependent upon society's efforts in behalf of those children whose parents cannot provide adequate development-fostering circumstances for them. Despite all these facts, the priority placed upon the needs of children in Government is low.

--This year, Federal benefits and services of all kinds for those 19 million people over 65 will total $25,700 million--an average outlay of $1,350 per person, but Federal benefits and services for the 24 million children under six will total only about 2,000 million--an average of only about $85 per child.

--This year, Federal health expenditures for the 19 million persons over 65 will total $4,400 million--an average of slightly over $234 a person, but Federal health expenditures for the 85 million children and youth under 21 will be only $9,000 million--an average of only $105 a youth, and health expenditures for the 24 million children under six will be only $200 million--an average of a paltry $8 a child.

--This year, Federal funds will account for from 50% to 83% of expenditures for such categories of human need as the aged, the blind, and the chronically disabled, but will average only about 10% of the expenditures for child-welfare services--excepting Aid to Families and Dependent Children. Child-welfare services constitute the only major category of human need in which the Federal government does not participate in financial support on an open-ended, matching basis with the States.

The needs of infants and children deserve top priority in Government. Yet, in our highly prosperous nation, the Children's Bureau, that one Federal agency which has since 1912 been charged specifically with the needs of children, is relegated to minor status. Moreover, stories in the newspapers suggest that this bureau is about to be broken up.

The Weakness of Existing Efforts

Clearly, efforts and expenditures in behalf of children must be increased substantially if we are to equalize opportunity and to prevent the damage being done to many, especially to the children in families of low income.

But even if the investment in the needs of young children were multiplied several times over, it is the sober conclusion of this Task Force that tragedy and waste would continue on a massive scale. They would continue because many of the existing efforts to help children and their parents fail in essential regards.

--They fail because the services are themselves fragmented. The various agencies, each concerned with a restricted aspect of a family's problems, are located separately. Economic assistance must be sought in one place, medical services in another, legal help in another, and psychological help or social service in yet another. For any given family, the various activities are uncoordinated, and their effects may even be contradictory.

--They fail because they are inadequate and because they seldom provide a situation calculated to restore hope, confidence, and initiative in children's parents. Public Welfare and Unemployment Insurance were planned to provide a cushion against at least the want of most physical' necessities, but the national average of public assistance payments provide little more than half, and in some low-income states less than a fourth, of the amount required for basic requirements. Even so, those of marginal employability can barely earn the equivalent of public assistance payments in the labor market. When such people are "on relief" and then find work, unfortunately, the payments stop, or the income from their work is subtracted from them. Unable to improve their miserable lot, they lose hope. All too commonly parental loss of hope is passed on to their children in a cycle of poverty. Aid to Families and Dependent Children (AFDC) has represented a laudable human concern for the young and their mothers, but the payments are so low that they perpetuate poverty (See II-E, pp. 59-63). Moreover, AFDC contributes to family instability. Such aid was originally planned for families with the father absent. When a father's earnings are low and precarious, marital strife is common. When a father's earnings fall below what mother and children could obtain from AFDC, and what they can obtain only with the father absent, as is still the case in 28 of the States, the father becomes expendable. Children are left without fathers, and sons without even a male model to emulate.

--They fail from ineffective use of professional help. Since professional helpers are in short supply, and since many of them look at families only from the limited standpoint of their own services, little happens. Moreover, many of the supports and services which children and parents need most could be provided by non-professional personnel with minimal training, working under professional guidance.

--They fail from attempting to intervene from the outside. Our services have attempted to "do for" children and their parents instead of arranging the situation so that it encourages and rewards their own constructive efforts, fosters functional cooperation among neighbors, and mobilizes the rehabilitative power of local neighborhoods and communities.

What is Needed

What is needed is more concern for the conditions of early child development, but it is not merely more money or more manpower, important as these are. We need remedial programs to correct the damage that has been done in earlier years; we need preventive measures; we need to provide new measures to foster intellectual and motivational development. But what is needed above all is the utilization of our existing resources for the creation of new types of social institutions which will help the 60% of urban families and neighborhoods to exercise once again their unequaled potential power to foster the growth of children into healthy, competent, happy, and responsible members of society.

The Urban Decline of the Family and Neighborhood

The words "once again" are used advisedly. For it is the judgment of this Task Force that industrialization and urbanization, although they have brought great economic benefits to our country, have at the same time, especially in the course of their recent spurt (See Section II-D, pp. 53-56), deprived children of some of their most important sources of strength and humanity. They have replaced the extended family with the nuclear family of parents and children. They have reduced the number of adults with concern for child's development and conduct. They have reduced the amount of contact that children have with their fathers.

Increasingly often, today's housing projects have no stores, no shops, and no adults at work or play. This narrowing of children's adult world poses serious threats to their social development. Their values and standards tend to be the product of an unstable peer culture, and these values are often antithetical to those of the adult culture. This is especially true for families in poverty, for the two parents, and in many cases the mother alone, are left entirely to their own meagre resources--resources impoverished in every sphere, economic, social, psychological, and physical.

In such an alienated world, parents cannot function as parents. They, and their children, need the support of active involvement in a neighborhood where children and their parents have a place together.

For these reasons, all of the services which the children and families of poverty require so desperately--be they economic, educational, medical, or social--must be provided in such a way as to help restore the family and the neighborhood as constructive forces in the lives of children. Without such restoration of the social fabric, no amount of money or professional services can enable children to attain the competence and humanity which are their birthright.

B. Recommendations

These foregoing considerations shape the recommendations. This Task Force aims to raise the priority of concern at all levels of Government for the opportunity of all children to develop optimally; we offer a new kind of institution designed to re-establish neighborhoods in which parents can function effectively in behalf of their children; we urge legislation authorizing Federal matching of State funds for child welfare services; and we offer plans for training personnel and for research and development for the children of the future. We believe that these recommendations are of major importance and should be the subject of a special Presidential Message.

1. Establish a Federal Office for Children in the Department of HEW

The Task Force recommends:

--that this Office be administered by an Officer for Children equivalent in rank to the chief officers for health, education, and welfare.

This Officer would:

--administer the programs now lodged in the Children's Bureau, Head Start, and the new programs proposed by this Task Force.

--act as the "ombudsman" for children in the Federal Government coordinating closely with other agencies to assure that existing programs give priority to the needs of children and are used effectively to foster child development, and examining laws affecting the welfare of children to assure that they benefit children.

2. Increase the Priority of Children's Needs in Community and State Governments

The Task Force recommends:

a) that Federal grants be made to Community Commissions for Children at the appropriate level--city borough, county, or complex of counties (perhaps even crossing State boundaries)--to plan community-wise for the welfare of children.

These Community Commissions for Children would be quasi-public bodies in each community. Each Commission must contain representatives of the families to be served, professional people concerned with children, and the chiefs of the official "bureaucracies"--chief community officials of the schools, the agencies of health and public welfare, the poverty programs, and perhaps the police.

These Community Commissions for Children would:

--devise plans to assure that the available resources of the community are used effectively for children.

--initiate and organize the Centers for Children and Parents in the neighborhoods and receive applications for the support of such Centers from such initiating agencies, private or public, as can muster the necessary cooperation from other agencies to provide comprehensive and continuing services.

--work out ways to secure needed resources that are not immediately available.

--devise and experiment with new programs.

--collaborate with such local institutions of higher education as community colleges and teachers colleges in the training of personnel needed in the care of children.

This Task Force also recommends:

b) that Federal grants be made available to the States to assist them in establishing mechanisms to do at the State level what the Commissions for Children are designed to do at the Community level.

At the outset, the responsibility for determining the standards under which grants will be awarded to Community Commissions and to Centers for Children and Parents--in the neighborhoods--will reside at the Federal level. The ultimate objective, however, is to delegate a considerable part of this responsibility to the States as they demonstrate commitment to the needs of young children and initiative in developing programs recognizing the significance of development-fostering conditions.

3. Neighborhood Programs

In order to strengthen families for their child-rearing function, the Task Force proposes a new kind of social institution and several programs at the level of local neighborhoods (See III-C, pp.102-121).

As the new kind of social institution, the Task Force recommends:

a) that Federal grants be made available to communities to establish Centers for Children and Parents in the neighborhoods.

These Centers aim to help children to develop more nearly their full potential, to help to overcome the inequalities of opportunity that come with the accidents of their birth, and to foster the establishment of cooperative enterprise in local neighborhoods by getting parents to organize in behalf of their children and to participate in the planning of the programs.

These Centers for Children and Parents (See III-C, pp.104-115) in the neighborhoods would:

--integrate the now fragmented existing services for young children and parents by making a wide range of them--economic, family planning, medical, and social--available through a single door.

--help rebuild the social fabric by involving parents in planning programs.

--provide new programs of group care--day-care and preschool facilities--aimed at enhancing the development of competence in children.

--teach both parents and adolescents how to do better for their children through participation in the operation of the day-care and preschool facilities, counseling, and educational entertainment.

The Federal grants for Centers for Children and Parents would, ideally and ordinarily, be made to or through Community Commissions for Children. In exceptional instances where local circumstances prevent the establishment of a Commission for Children and/or the use of a public agency, any private or public, non-profit agency might apply for a grant. In such instances, the reasons for not establishing a Community Commission and/or using a public agency must be described. In addition, any private or public, non-profit agency may take the initiative in applying to the local Community Commission for the support for a neighborhood Center for Children and Parents.

The forms which the Centers for Children and Parents take must inevitably vary in such differing settings as housing projects in large cities, neighborhoods of individual homes in smaller cities, and the rural settings of Appalachia. The Centers can be expected to vary in size. Many would serve perhaps 1,000 families, offering directly as many of the traditional health and welfare services as feasible through a single open door, offering in satellite facilities such services as day care, the preschool program located within the neighborhood of the children served, and offering by referral such services as hospitalization and residential treatment of behavior disorders.

The Centers for Children and Parents are planned as a permanent program, but the Task Force recommends:

--starting on a moderate scale as a pilot program with a total of approximately 100 Centers.

In addition to or in connection with the neighborhood Centers for Children and Parents, this Task Force recommends:

b) Federal grants for experimentation in pilot projects with other kinds of child care.

These should be designed to strengthen families, and to foster hope and initiative in parents. The Task Force lacks the expertise to recommend any specific kinds, but, for illustration, would suggest in such other ways as:

--experimentation with such income maintenance proposals as "children's allowances" and "paying mothers for 'services' as mothers" to motivate them to care for their own infant children instead of working because good professional group-care may be more expensive than such approaches, and because mothers, generally, are the best caretakers for their own infants.

--experimentation with foster day-care for small groups of infants and very young children where the foster parents are carefully selected and adequately paid.

Since unwanted children are often neglected, and since they use the already too-meagre resources of their older siblings, the Task Force recommends that efforts be made to:

c) increase the availability of information and of devices for family planning.

The development of children in the slums or near slums is hampered by a physical environment that is bleak and ugly, that makes cohesive neighborhood organization difficult, and that, by removal of shops from public housing projects, for instance, has lost for the neighborhood children the opportunities to observe and imitate adults at work and to be guided by them. In the hope of improving housing for the children of the future, the Task Force recommends:

d) that additional funds be made available to the Department of Housing and Urban Development for research and development, and

--that the Secretary be asked to give a high priority to planning for construction or rehabilitation that will foster cohesive neighborhoods that strengthen family life, and that will provide adequate facilities for the needs of children and for their safety.

Finally, because it has been the most promising new program for fostering the development of children that has come in a long time, the Task Force recommends:

e) expansion of Head Start to maintain and increase the momentum which that program has established.

4. After Head Start, Keep Moving

In view of concern that the beneficial effects of Head Start and similar enriched programs will be lost unless the basic elements are continued through the educational programs for children aged 5, 6, 7, and 8 years, the Task Force recommends:

--that if any additional funds for education of the disadvantaged are appropriated under the Elementary and Secondary Education Act, such funds should be earmarked specifically for "follow through" into the kindergarten and early primary grades.

These funds should be expended for such techniques as involvement of parents, use of the teacher-pupil ratios of Head Start, use of volunteers and aides, "ungrading" of classes, increased use of innovative and individualized curricular materials, and arrangements for exchange of teachers and other personnel between preschool and the school programs for children aged 5, 6, and 7.

In addition, the Task Force recommends:

--Federal grants to universities for development of new curricular materials to be used for instruction preparatory for homemaking and child rearing in the elementary and secondary schools.

--Federal awards to school systems that introduce effective innovations for children aged 5, 6, 7, and 8.

--Cooperation within the various communities between the schools and the Centers for Children and Parents in all feasible ways.

5. Federal Matching of State Funds for Child-Welfare Services

The gross inadequacy of such child-welfare services as day-care, foster care, and institutional care for both dependent children and children under treatment of various kinds (See II-E, p. 64ff) results largely from the fact that Federal support for these services is limited to formula grants to the States in the average amount of only 10% of their total cost. In contrast, the aged, the blind, and the chronically disabled get Federal funds amounting to from 50% to 83% of the cost in open-ended matching of State funds. In view of the great need to increase child-welfare services, the Task Force recommends:

--enactment of legislation providing for Federal open-ended matching of State funds for child-welfare services.

Such Federal matching of State funds for child-welfare services would provide a substantial portion of the funding for the Centers for Children and Parents, especially for day-care facilities. They would also increase the supply of foster parents and permit both improved staffing in children's institutions and improved community measures to protect neglected and abused children.

6. Start Training Staff for the Future

As the Centers for Children and Parents move from the initial pilot stage to a full-scale operation across the Nation, great increases in personnel trained to work with children will be required. All types of personnel are in short supply; pediatricians and public health nurses are in especially short supply.

To insure adequate number of properly trained professional workers for the future, the Task Force recommends:

--increased funding of support for existing programs of training for all of the professions and investigative disciplines concerned in child development under the Public Health Service.

--greatly increased funding of the existing program of support for the training of pediatricians and nurses under the Children's Bureau.

--the enactment of legislation, already supported by the Administration, for the training of social workers.

--amendments to authorities for teacher institutes and graduate teacher training programs in the Office of Education to include preschool teachers and an expansion of grants for the purpose.

--new legislation to develop curricula and techniques for the training of new professions to work with children and parents--initially incorporating education, child development, home economics, and social work--and support for the training of personnel in the new professions.

In addition, the Task Force recommends:

--that the new Office of Children, proposed above, be given responsibility for devising ways in which Federal grants for Vocational Education and for Community Work training can be used to train subprofessional "upbringers" in the Centers for Children and Parents, collaborating with local high schools or community colleges, for work in the Centers and in various institutions for children or as "home visitors."

--that the new Office of Children should also be given responsibility for maintaining proper standards for such training.

7. Research and Development for Children of the Future

Knowledge of the biological and psychological aspects of development has increased substantially in the two most recent decades. It is this new knowledge which attests the great importance of circumstances during the prenatal months and early years for later child development. It is this new knowledge that is suggesting our new approaches toward the fostering of competence, motivation, and humanity in young children. Yet, least precise is our knowledge of those conditions which are required during the earliest years to insure the optimal development of children. For this reason, the Task Force recommends:

--increased funding of support for all kinds of research concerned with child development.

--special attention to the development of new kinds of experiences to foster the cognitive, motivational, and social development of young children with tests of their effectiveness,

--the development of new approaches to helping parents in their child-rearing with tests of their effectiveness.

--the development of new curricula for preschool and for children aged 5, 6, 7, and 8 years with tests of their effectiveness, and

--investigations of the effects of the many ways in which children are brought up in the various classes of American society and in the various cultures of the world.

Believing that it is especially important to combine research and development with a program of action, the Task Force also recommends:

--Long-term Federal grants for approximately ten Centers for Children and Parents attached to universities near various kinds of communities.

In these Research-and-Development Centers for Children and Parents, representatives of various biological and behavioral sciences can collaborate with each other, with educators, and with personnel giving other professional services. They can collaborate in both fundamental research and in the development and testing of hypotheses concerning how best to foster development in very young children and to help families.

C. The Broader Goal: Improving the Quality of American Life

The Task Force recognizes that these recommendations propose a demanding program. So must be any program commensurate with the need. Many of these recommendations can be implemented with existing funds; others will require new legislation and appropriations. The initial appropriations need not be large. It is sounder to start in a limited fashion and expand than to risk imposing nation-wide an untried pattern. Yet, in the end, the financial commitment must be massive.

If we choose now not to mount the effort and meet the cost, we shall eventually pay a far higher price in human misery, and even a higher price in economic cost and loss. Nor can we refuse to mount the effort if we are true to our heritage, for we are confronted not merely with the needs of America's children, but with their inalienable rights.

Yet, in urging action on these recommendations we are animated by a concern not only for America's children, but for the Nation. In its broadest perspective, the goal of these recommendations is to strengthen our national life by improving the quality of the lives of our children.

We believe that a rededication of America to the needs of her children and the realization of their human potential beyond our own will help not only to increase their competence but also to rekindle that spirit of generosity, of magnanimity, of neighborliness, of gentleness and compassion, and of zest and adventure that are part of the American heritage.

Let this generation of Americans be remembered as that which served its Nation's highest goals by guaranteeing to children their inalienable rights to health, competence, dignity, and responsible membership in the human community.

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The subsequent sections of this report document and elaborate the analysis (Section II) and elaborate the recommendations(Section III).

II. DOCUMENTATION AND ELABORATION OF THE ANALYSIS

A. Importance of Circumstances During Early Development

Our forefathers were thinking in terms ethical and political rather than in terms biological when they declared that "all men were created equal." In this declaration, they had no concern with those inevitable heredity-based differences among people. Neither were they concerned with the competence of people. They saw equality of opportunity almost exclusively in ethical terms as an inalienable right. How much importance one attributes to this right in our day is a matter of the importance one attributes to circumstances other than political interference in determining life. How much importance one attributes to the rights of children is a matter of the importance one attributes to environmental circumstances in children's development of those qualities--especially competence, motivation, mental health, and social responsibility--required for full participation in our increasingly technological society.

Historical Swings of Opinion

A sketch of the swings of opinion on the importance of environmental circumstances in child development since the days of America's founding fathers may be helpful in understanding the challenge of our day.

The nineteenth century has been called "the century of the child." Americans saw the chief way to better man's lot through education. Americans established public schools everywhere. American women formed child-study clubs and associations. American philanthropy attempted to teach those moral qualities that would improve the condition of the poor and later built and ran such settlement houses as the famous Hull House in Chicago to help equalize the opportunities for poor children. When this climate of concern for children had reached its peak at the end of the nineteenth century, Florence Kelley and Lillian Wald proposed a Federal Bureau or Commission on children. Presidents Theodore Roosevelt and William Howard Taft, as well as a large share of the public, supported the proposal. The final bill to establish the Children's Bureau, sponsored by Senator William E. Borah, passed the Congress early in 1912 and was signed by President Taft in April of that year (See Cremin, 1962).*

Ironically, almost immediately after the establishment of the Children's Bureau, American faith in the importance of environmental circumstances in the development of children and in education as the way to better man's life declined. Since this faith was based upon ethical considerations and upon only opinion about the importance of environmental circumstances in development, it could not withstand the impact of several developments that participated in its decline (See Hunt, 1964a).

One of these developments starts with the debates over evolution and consists in their impact on what became the intelligence-testing movement in America. Some of the earliest roots of this development go back to the religious doctrine of predestination. This doctrine got replaced during the debates over evolution by the notion of hereditary predeterminism. From Darwin's theory that evolution occurs through the fit surviving to reproduce their kind, such followers as Francis Galton--Darwin's younger cousin--and G. Stanley Hall drew what appeared to them to be the necessary logical, but is to us an unnecessary, implication that development is predetermined and that each individual's traits are largely fixed by heredity. Unlike our founding fathers, Galton and Hall were centrally concerned with achievement and competence. Galton supported his notion of hereditary predeterminism with evidence that genius runs in families, neglecting to consider the inequalities of opportunity in families of differing levels of affluence, education, and social status. Since these men taught the leaders of what became the intelligence-testing movement in America, their influence was great. Within less than a decade after the end of World War I, faith in heredity-predetermined development and fixed intelligence, as reflected in wide-spread belief in the constancy of the IQ, had become dominant in America (See Hunt, 1961, Chapters 2 and 3).

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*These names and dates in parentheses identify the references listed alphabetically in Appendix I. In order to limit the number of citations, a large share of those given are critical reviews which will provide the interested reader with references to the original papers describing the sources of the evidence.

Parallel developments in biology lent support to this belief in hereditary predeterminism. In the field of genetics, the work of Mendel, concerned with the hereditary transmission of traits, caught on much earlier than did the work of Johannsen, concerned with the interaction between heredity and environment (See Hunt, 1961, Chapter 3). Moreover, very widely accepted was the related notion that the germ plasm, presumed to control maturation, is completely separated from somatic influence and also, during gestation, even from influences based on the health and nutritional condition of the maternal host.

In the climate of opinion which emerged from these developments, highly suggestive evidence contradictory to the beliefs in predetermined development and fixed intelligence went neglected. For instance, the notion that the germ plasm develops without any influence from the maternal host appears to have blocked recognition of the fact that contracting rubella, ordinarily known as German measles, during the early phases of a pregnancy often causes deformities in the developing embryo. Moreover, in this climate of opinion, it was regarded as nonsense to consider the possibility, even in research, of modifying the development of intelligence and competence by varying the environmental circumstance of children early in their development. In this climate of opinion, moreover, the differences among classes and races found with intelligence tests were considered to be immutable, and the poor were considered to be poor largely because they were incompetent by virtue of their hereditary constitutions.

A second development that helped to weaken faith in the value of education as a way to improve man's lot appears to have stemmed in part from failures in philanthropy. Philanthropic workers of the nineteenth century were much more concerned with the moral character of their clients than with their competence. When it became clear that their attempts to improve the condition of the poor with tracts of moral advice, along with their more substantial offerings of food and shelter, were useless, it weakened faith in moral reform through education. The weakening effect derived, of course, from their limited conception of education. All too often it took the form of a combination of imparting information and persuasive advice. At the same time, the conviction that economic factors quite beyond the individual's control are basic in the plight of the poor grew in importance.

A third development that helped weaken faith in education came simultaneously with the failures in philanthropy. It took the form of a conviction that it is economic factors that are chiefly important in the control of man's lot. It was in this context that the various socialistic movements rose in influence. It was in this context that, first, the European countries, and later America, undertook Governmental approaches to income maintenance for the poor.

A fourth development helped further to weaken faith in education as the way to better the lot of men while, paradoxically, rekindling faith in the importance of circumstances of early child development. This is the influence of Sigmund Freud and the psychoanalytic movement. While Freud was more concerned with the origin of the psychoneuroses than with the development of competence, through his theory of psychosexual development, he has probably done more to emphasize the importance of circumstances in infantile development than anyone else in the history of thought. Freud and his followers have been more concerned with the role of early experience in determining the emotional and motivational factors in mental health than with the origins of intelligence and competence and social responsibility. They put their emphasis on the fate of such instinctual modes of infantile pleasure-striving as sucking, elimination, and genitality. Their influence has tended to emphasize not only the importance of mental health but also to foster the belief that the circumstances of early child development are more important for the development of the emotional and motivational characteristics comprising mental health than they are for the development of intelligence and competence (See Hunt, 1965a). Nevertheless, Freud and his psychoanalytic movement, have helped tremendously to direct a new focus of concern on the circumstances of infantile and early-child development.

Finally, various advances in the behavioral and biological sciences have also helped to swing the pendulum of opinion to a renewed concern for the importance of environmental circumstances in early development. Moreover, these advances have served to take the importance of these circumstances out of the realm of opinion and to put their importance on a foundation of solid evidence.

Nature of the Evidence for the Importance of Circumstances in Early Life

Within the domain of biological genetics, the concept of hereditary predetermination has given away to the conception of interaction between heredity and environment. Variations in hereditary constitution determine the nature of the developmental consequences of variations in environmental circumstances, but a given hereditary constitution guarantees no set of individual characteristics (See Sinnott, Dunn, Dobzhansky, 1958, Chapter 2). The fact that even the sex of snow-pool mosquitoes can be modified by temperature dramatizes this point. When the larvae of genotypic males are reared at a temperature of 29°C, instead of the 4°C to 8°C to which this species is adapted, they develop genital organs of females (See Hunt, 1961, p. 331).

The importance of environmental circumstances for the earliest phases of animal development appears to increase up the evolutionary or phylogenetic scale of living organisms. Such a statement is an implication of the fact that the environment of embryonic development is more and more strictly specified up this scale. The embryos of the fertilized eggs of fish and amphibia, for instance, develop under circumstances no more specific than those in the relatively sheltered backwaters where such lowly species deposit their eggs. The embryos of fowls, on the other hand, develop within the strict confines of egg shells with temperature well controlled by brooding parent fowls. Those of mammals, moreover, develop for prolonged periods within the highly controlled confines of maternal uteri.

The condition of the mother during pregnancy is important for the development of the foetus during pregnancy. Despite the highly controlled nature of the intra-uterine environments of mammalian embryos, the belief that they are completely uninfluenced by the condition of the maternal host is no longer tenable. Recent evidence:

--indicates clearly that virus diseases and various drugs--e.g., the recent tragedy of the effects of thalidomide in Europe--pass the placental barrier and alter the development of embryos (See Montagu, 1962).

--suggests that emotional stress and the nutritional status of pregnant mammalian females influence the development of the embryos they are carrying. The nature of the influence is damaging (Montagu, 1962). Lilienfeld,. Knobloch, and Pasamanick (1956) have reported, moreover, that the incidence of such prenatal and paranatal complications as prematurity, bleeding, and toxemia is considerably higher in women of low socio-economic status than it is in women up the socio-economic scale. They and other investigators contend that these disorders result in foetal damage to the nervous system which decreases hereditary potential and often precludes normal psychological development.

These investigators also contend with at least suggestive evidence that the incidence of these disorders of pregnancy and the damage to the embryo or foetus can be substantially reduced by protein and vitamin supplements to the diet and by prenatal care of high quality.

The circumstances of early post-natal development are important even for the anatomical maturation of the nervous system. Adequate contact with light is crucial for the maturation of the visual system.

--Rabbits, kittens, rats, and chimpanzees all have shown defects in the ganglion-cell layer of their retinas and in their optic nerves after being reared from birth in darkness for extended periods of time (For references to the reports of the original studies, see Hunt, 1964b, p. 216).

The complexity of the circumstances with which organisms have perceptual and manipulative contact affect the thickness of the cortex and the chemical activity of cortical tissue.

--Rats reared in complex environments have both cerebral cortexes heavier and thicker and a higher total acetylcholinesterase activity of the cortex than do litter-mates reared in the less complex environments of laboratory cages (Bennett, Diamond, Krech, & Rosenzweig, 1964).

--Rats reared in "enriched environments" have been reported to have a higher rate of multiplication of glial cells.

--Rats have been reported to show increases in RNA production in certain nuclei of their brains following the learning of a skill which involved especially those nuclei (For the references to these investigations, see Hunt, 1966a, pp. 113-116).

The environmental circumstances in which infant animals are reared have been found experimentally to have substantial effects upon their later ability to solve problems.

--Pet-reared rats are more competent in solving maze problems than cage-reared rats, and pet-reared dogs are substantially more competent in solving problems of various kinds than are their cage-reared littermates (See Hunt, 1964b, pp. 216-217).

Even patterns of adaptive behavior long considered to be instinctive have failed to develop when the circumstances required to provide appropriate experiences for their development have been removed.

> --Female rats deprived of anything to manipulate during their early months, are inadequate nest-builders when their own litters come (See Hunt, 1966a, p. 99).
>
> --Monkeys reared from birth on surrogate mothers consisting of wire frames covered with padding and terry cloth failed to copulate successfully as adults. Female monkeys, so reared, do become pregnant, but they do not care properly for their new-born young (See Harlow, 1963).

The importance of environmental circumstances for both prenatal and early post-natal development appears to increase up the evolutionary scale.

> --While the influence of deprivations of activity, produced for a period of five days by means of the drug, chloretone, did not alter the acquisition of the swimming pattern in such lowly amphibian creatures as salamanders and frogs, the failure of the yolk sac to descend to the ventral side in chicks resulted in crippled birds (See Hunt, 1964b).
>
> --The limitations in ability to solve problems from early experiential deficits associated with cage-rearing as contrasted with pet-rearing appear, at least suggestively, to be less in degree and to be more readily reversible in rats than in dogs (See, for original references, Hunt, 1964b).

Such evidence of a trend up the evolutional scale suggests that the role of early environmental circumstances in the development of intellectual competence and motivation may achieve its maximum in human beings. To what extent the effects of early experience are reversible is an unsolved problem. Whether resistance to reversal is due to habituated social roles that fail to provide new challenges and to attachment to accustomed circumstances or to progressive limitations on potential remains to be determined.

The IQ is defined as the Mental Age of an individual divided by his chronological age. This ratio represents the rate of an individual's development. The assertion that the IQ is constant means that each individual has a constant, heredity-determined rate of development. Yet, evidence that the rate of development can be modified by environmental circumstances, especially those of the first years, is quite clear. Evidence of the environmental modifiability of the rate of development in human infants has existed for a long time, but only in the light of such recent findings in lower animals as those illustrated here has this evidence come to be recognized for what it is. It has been evident for more than a century that infants developing in orphanages are marked by apathy and retardation, but these characteristics were explained away by assuming that only those infants with inferior heredity remained in the orphanages. Those not inferior were presumably adopted. In the past two decades, the amazing degree to which the retardation associated with orphanage rearing can go has been dramatized. For instance,

> --in an Iranian orphanage observed in 1957 by Professor Wayne Dennis of Brooklyn College, 60% of the infant inmates in their second year were still unable to sit up alone, and 84% of those in their fourth year were still unable to walk (See Hunt, 1964b, p. 217).

Investigators do not yet agree on the nature of the circumstances which are responsible for such retardation and the apathy that commonly goes with it. Only continued investigation will clarify what circumstances in infancy are especially important for retardation and apathy, but it is clear that something in both institutional and lower-class rearing can greatly hamper infant development.

Experimental enrichments of experience have also hastened development.

> --Arranging objects of proper complexity for new born infants being reared in a hospital to look at has reduced the ages at which appear the initial and terminal behavioral landmarks of eye-hand coordination --fisted swiping and mature reaching--from 72 days and 145 days, respectively, to 55 days and 85 days respectively (White & Held, 1966).

In the familiar terms of the IQ ratio, this hastening of the appearance of fisted swiping amounts to an increase from 100 to 131, and the hastening of mature reaching amounts to an increase from 100 to 171. As of now, it remains for research to determine the degree to which such increases could be maintained or even increased by providing circumstances that would call out children's full potential for development.

In the light of such solid evidence as this merely illustrated here, it is evident that the importance of early experience in the development of later behavioral characteristics is no longer a matter of opinion. Moreover, it is also clear that the circumstances of early development are as important for later intelligence and competence as they are for the emotional and motivational characteristics comprising mental health (See Hunt, 1965a).

Degree of Later Effect and the Duration Circumstances Persist

Solid evidence also indicates that the longer any given kind of circumstances continue to influence the very early development of organisms, the more difficult it becomes to alter the direction of their effects later. Such evidence is abundant at all levels of animal life (See Hunt, 1961, pp. 321 ff.)

--In such lowly amphibian creatures as salamanders and frogs, inhibiting the activity of the embryos with chloretone for the first five days of development has no observable effect on later skill in swimming, but inhibiting their activity for 10, or even for 8 days, results in tadpoles that never learn to swim properly.

--Preventing newly hatched chicks from pecking by keeping them in the dark for 5 days results in but minor temporary damage to the pecking response, but preventing them from pecking by keeping them in the dark for 10 days results in complete loss of the inclination to peck.

- --As any farmer boy knows, calves pail-fed for only 2 or 3 days following their birth readily learn to suck cows for their nourishment, but calves pail-fed for 2 or 3 weeks can be released with fresh cows without worry that they will rob the milk crop.

- --Infant monkeys isolated from birth for only the first 80 days of life are ultimately able to attain "almost normal" sexual behavior, but those isolated from birth till they are six months of age are rendered permanently inadequate in sexual behavior (Harlow, 1963).

- --Chimpanzees kept in the dark for some six months recover much of the damage done to their visual systems, but chimpanzees kept in total darkness for 18 months show irreversible deteriorations in the ganglion-cell layer of their retinas (See Hunt, 1966a, p. 114).

Clearly, the time during which a set of circumstances remains in operation is a strong factor in determining the degree and the persistence of their later effects.

The hypothesis of critical periods in early development is related to the proposition that duration is an important factor in determining the persistence of effects. The concept of "critical period" has derived from observing that newly hatched birds will form affectional attachments to mother birds, to foster mothers of other bird species, to human beings, or to any kind of object with which they have perceptual contact during the first 48 hours after hatching.

- --The fact that later perceptual contacts fail to yield such attachments coupled with the fact that the early attachments are highly persistent has led some investigators to conclude that there is a period in the first hours after hatching in the life of birds which is highly critical for the formation of emotional attachments.

- --An analogous critical period for the development of social behavior has been found in dogs, It is, for instance, almost impossible to make pets of dogs that have not seen and been handled by human beings during the 40 to 60 days following the opening of their eyes and ears.

--The observations of Piaget on the early intellectual development of his own three children and the experimental work on problem solving in human beings combine to indicate that abilities are organized hierarchically and that the development of each new level in the hierarchy constitutes a landmark of psychological development.

Yet, whether it is proper to speak of "critical periods" in human development is a moot point. It may be argued that the transitional landmarks in psychological development are less a matter of the anatomical maturation, presumed to be controlling in the hypothesis of "critical periods," than of the effects of experience derived from the circumstances encountered. The issue of "critical periods" is really beside the point, however; what is important is the fact that the longer a set of experiences endures, the more difficult it is to change the direction of the effect. For the development of intelligence as measured by the tests at age 17, when such development is nearly complete, the data available suggest that "50% of the development takes place between conception and age 4, about 30% between ages 4 and 8, and about 20% between ages 8 and 17" (See Bloom, 1964, p. 88). Similar trends are characteristic of the development of other traits. Never was the adage that "an ounce of prevention is worth a pound of the cure" more applicable than for the role of environmental circumstances in early child development.

Social Import of the Effects of Circumstances in Early Life

The modifiability of various aspects of development is no mere academic matter. Evidence illustrating the social import of modifications of that intelligence and motivation which underlies competence comes from following-up the subjects in a study originally reported by Skeels and Dye (1939).

Their original report was ridiculed, but in retrospect, it appears to be a pioneering landmark.

Their study was prompted by a "clinical surprise." Two infant residents of a State orphanage, one aged 13 months with a Kuhlmann IQ of 46 and the other 16 months with an IQ of 35, were committed to a school for the mentally retarded. The infants were housed on a women's ward. The mentally retarded women on the ward became very much attached to the infants. They played with them during most of their waking hours. Moreover, the attendants took a great fancy to the babies, took them to the store, bought them toys, picture books, and play materials. The "clinical surprise" came when these children were re-tested six months after their commitment. The IQ of one had increased from 46 to 77; that of the other from 35 to 87.

In consequence of these surprising improvements of 31 and 52 IQ points, respectively, a group of 13 infants from the orphanage, with IQ's ranging between 36 and 89 and ages ranging from 7 to 30 months, were transferred experimentally to such wards. After periods ranging from 6 months to 30 months, these children were re-tested. Every one of the 13 showed a gain. The minimum gain was 7 points; the maximum was 58 points. All but four showed gains of more than 20 points. These gains illustrate again the point that permanence of effect is a matter of the duration that a given kind of circumstances remain operative, and that the effects of damaging circumstances for brief periods are largely subject to correction by altering the circumstances.

For contrast, 12 other infants with IQ's ranging from 50 to 103 and ages ranging from 12 to 22 months, were left in the orphanage. When these 12 infants were re-tested after periods ranging from 21 to 43 months, all but one showed a decrease in IQ. These decreases ranged between 8 points and 45 points, with 5 decreases exceeding 35 points. Clearly, without correction, the effects of the damaging circumstances increase in degree with time.

In a recent study by Skeels (1966), these two groups of infants, now adults, have been found and visited. They continue to differ markedly. All 13 of those who were transferred from the orphanage to the school for the retarded, and who were later adopted, are now self-supporting. Their median educational level is high school graduation. Eleven of these 13 have married, and 9 have children. In the contrast group of 12 children who remained in the orphanage, the median educational level is less than completion of the third grade. One died in adolescence following continuous residence in a State institution for the mentally retarded. Five remain as wards of such a State institution. Employment of the remaining 6 can be characterized at best as marginal. They are "hewers of wood and drawers of water."

Clearly, those who remained in the orphanage did not have an opportunity to achieve their hereditary potential equivalent to that of those who were transferred as infants from the orphanage to, ironically, a State institution for the mentally retarded, and who were later adopted. Even economically the costs of custodial care for the former group coupled with the loss of their potential productivity has been many, many times the cost of the extra care given to those who were transferred from the orphanage to the State school for the mentally retarded and later adopted. Multiply these economic consequences by hundreds of thousands, and one can see the economic effects of allowing damaging circumstances to endure in the lives of children. Beyond these economic effects are the priceless social consequences of human potential unrealized.

While the findings of these studies of Skeels and Dye (1939) and Skeels (1966) might well be questioned because they are based on only 25 children, other investigations have corroborated the fact that enrichments in the circumstances of already disadvantaged children will (if sufficiently early, if appropriately matched to the children's level of development, and if sufficient in degree and duration) increase the rate of their psychological development substantially. Among these others are those original studies by Wooley, by Barrett and Koch, by Ripin, and by Skeels, Updegraf, Wellman, and Williams (See Hunt, 1961, pp. 27-28). The findings from these studies were severely criticized for defects in their experimental design, and this criticism deprived them of much of the suggestive value they deserved to have. More recently, in retarded, orphanage-reared infants during the last third of their first year, Sayegh and Dennis (1965) have reported that merely an hour of supplementary experience a day for 15 days resulted in an average of 2.5 months of gain in developmental age--approximately five times the average monthly gain during their previous months under orphanage circumstances. Very recently, moreover, most of the investigations of change in tested intelligence in those children from disadvantaged families participating in Head-Start programs have shown gains, while similarly disadvantaged children who did not participate in Head Start have shown losses (See for summary, Brittain, 1966). The more specifically the programs have been aimed at providing circumstances that foster intellectual development, the greater the gains.

The Importance of Familial Experience

Social circumstances and especially those encountered within the family, are especially important for all aspects of development in infancy and early childhood. As already noted, it was Freud who was probably most important in focusing attention on the importance of early familial experience in psychological development. Our conception of the nature of what kinds of circumstances are important, however, has been changing as evidence accumulates. About the only concensus that exists concerns the importance of familial circumstances (See Bronfenbrenner, 1967).

Freud originally emphasized the fate of instinctual needs as the basis for their transformations in the course of early development. He and his followers considered sucking, for instance, to be an inborn, instinctual need. An instinctual need must be gratified or result in distressful excitement or anxiety. Sears and his collaborators, however, found that infants cup-fed from birth showed no distress and actually sucked less strongly than those breast fed. Those cup-fed were also less likely to suck their thumbs persistently than those breast fed. From these and other findings of the same kind (See Caldwell, 1964, Yarrow, 1961), it appeared that the sucking need was not inborn, but was rather acquired in the course of being associated with the gratification of hunger. Thereafter, however, sucking could be frustrated with distress as a clear consequence.

Similarly, Freud and his followers regarded an infant's attachment to his mother to be instinctual (See Ribble, 1944). When Spitz (1945), one of these followers, observed in orphanage-reared infants extreme retardation--like that observed by Dennis and already noted--he attributed it to deprivation of maternal affection. On the basis of such findings as those of Spitz, Bowlby (1951, p. 158) asserted that ". . .mother love in infancy and childhood is as important for mental health as are vitamins and proteins for physical health."

Spitz himself noted, however, and other investigators since have noted that the signs of distress with an infant's separation from his mother do not appear before an age of approximately six months. This finding suggested that the retardation must be attributable to something besides the disruption of an instinctual affective tie between the infant and his mother. Both Dennis (1960) and Casler (1961) have minimized the importance of this affective tie during the first half of the first year as the cause of retardation. Dennis has emphasized "the restriction of specific kinds of learning opportunities," and Casler has emphasized the restriction of auditory, tactual, and visual experience and of opportunity for motor activity and manipulation. Hunt (1965b) has emphasized the absence of access to circumstances that change with the infant's level of experience-induced development. In the first weeks following birth, he contends that interest is fostered and apathy prevented by changes in various characteristics of auditory, visual, and, perhaps, tactual input. As certain patterns have been encountered repeatedly, he contends that they become recognizable and desirable, and the infant strives for them. Later, infants become interested in what is novel. When infants become active strivers, Hunt contends that it is highly important for them to get the events they intend and strive for, at least in a fair share of their strivings. Hunt regards the retardation, and the apathy which usually goes with it, in orphanage-reared children to be a consequence of monotonously unchanging circumstances that do not respond to infants' strivings. Much more investigation of the conditions controlling development in early infancy will be necessary before their results dictate a concensus.

It is extremely expensive to supply professionally the responsive social circumstances required to foster development in infants and very young children. It is expensive to buy the responsiveness to the early strivings of infants that love will ordinarily motivate in their mothers.

The fact that retardation and apathy begin before an infant begins to show distress at separation from his mother does not mean that the affectional tie, once learned, is unimportant. This affectional tie appears to come when an infant has developed an image of their mother's face which he then associates with the events she provides in response to his strivings, with the gratification she brings to his hunger, and with the relief she provides from various kinds of distress (See Hunt, 1965b). Once the affectional tie is formed, separation brings intense distress. This distress appears to reach a maximum toward the end of the first year and early in the second when objects perceived have acquired permanence. Considerable evidence has been amassed to indicate that one factor in the intensity of the distress which is associated with separation from mother is a matter of how responsive she has been to her infant's strivings (See Bronfenbrenner, 1967). This distress is typically accompanied also by marked deficits in the kinds of performances that are put in tests. The emotional distress from maternal separation appears to interfere with coping behavior. Children may withdraw and even become ill.

Various studies indicate that repeated disruptions of a child's affectional tie with mother, or mother substitutes, commonly results in persons who come to resist forming such attachments, and with this they lose the motivation to acquire skills and values from adults (See Yarrow, 1961). Many of those people who become pathologically troublesome, as persistent liars, check forgers, etc., have histories of repeated disruption of the affectional ties they have formed with foster parents (See Bowlby, 1951). This is why it is socially so very important for society to provide stable foster homes for dependent children without parents of their own.

The investigative indications that the strength of the affectional tie of infants and young children to their mothers is a matter of the mothers' responsiveness and also appears to have important consequences in subsequent socialization. Love of mother, and father, appear to be important in motivating learning through imitation (See Bandura, 1962). Insofar as parents, and especially mothers, are unresponsive to the early strivings of their infants and very young children, they fail to develop this kind of motivation for what appears to be almost automatic socialization. Such parents must rely upon other kinds of motivation to socialize their young, and these other kinds commonly take the form of reward and punishment. Defects of personality and character appear to be more common among children socialized in the latter fashion than among those who learn to love their parents early and who are motivated by love to learn by imitating not only their parents but other authority figures as well. In one study highly relevant to this point, Bandura and Walters (1959) compared the early child-rearing practices of the families of deliquently aggressive adolescents with the practices of families, matched in economic and social and professional status, where the children were especially cooperative and able. The chief differences in the child-rearing consisted in much greater use of physical punishment and of material rewards in the former group than in the latter groups. The fact that the former group used more of physical punishment and material rewards than the latter appeared to be necessary because the former group of mothers had been relatively unresponsive to their children's strivings when they were babies. They had thereby failed to establish the strong affectional attachments which motivate learning through imitation.

While such studies, that start with consequences and look backward for causes can never be definitive, they are highly suggestive. Such studies and many others point to the importance of the social conditions that children encounter within families for the development of later character. The suggestions which such studies provide should be heeded in the formulation of social policy. Social policy, in turn, should be under continual scrutiny and revision as more definitive evidence on early child development becomes available.

The form of child-rearing employed by parents is also important in the development of intelligence and of the motivation to solve problems. A study by Baldwin, Kalhorn, and Breese (1945) is both suggestive and illustrative. These investigators described several patterns of child rearing. Moreover, they followed the development of children in a sample of families employing these several patterns over a three year period. Over these three years, the children of parents employing "democratic" or "warm democratic" patterns of rearing gained on the average 7 or 8 points in IQ, while those reared under "actively hostile" patterns lost an average of slightly over two points, and those reared under either "passive-neglectful" or "possessive" patterns remained essentially the same in IQ. Here, the "democratic" pattern of child-rearing meant that the parents stopped to explain the reasons for their decisions and for the demands that they made upon their children. Such explaining was largely lacking in the other patterns of child-rearing.

In this study by Baldwin, _et al_., the sample of families came largely from the middle class and the lower-middle class. Even so, these differences in intelligence, as tested, made their appearance over a period of merely three years, as the children were increasing in age from approximately 4 to approximately 7 years. Great differences in child-rearing practices exist among cultures and among the social classes within our own culture. For the most part, investigators of culture and personality before World War II were concerned chiefly with consequences of child-rearing in emotional and personality traits, but there were exceptions. For instance, Asher (1935) and Gordon (1923) both noted that the IQ tends to drop with age in children reared under familial conditions which deprive them of those experiences which foster intellectual growth. Moreover, shortly after World War II, Davis and Havighurst (1946) called attention to the consequences of lower-class rearing, and noted in connection therewith that most Negroes, by virtue of their history in slavery and their subsequent lack of economic opportunity in the United States, are of the lower class. In the light of such considerations, class and race differences in intelligence, as tested, could hardly continue to be attributed entirely to differences in hereditary potential. The charge to this Task Force demands further discussion of this point. Here, we attempt merely to establish the proposition, perhaps unnecessarily, that the social circumstances which a child encounters within his family are highly important for his later development. They are important not only for later social and personality traits and for character, but also for intellectual competence.

B. Development-Fostering Experience and the Nature and Consequences of Slum Rearing

Evidence is accumulating to indicate that the circumstances of slum rearing produce experiences that hamper the development of the young during both the prenatal phase and the post-natal phase in ways that damage almost every human trait of social importance.

Development-Fostering Experience

What is required to call forth the hereditary potential of children, to the extent that we know, consists in a variety of circumstances which change with the individual child's own stages of development. In the pre-natal stage between conception and birth, it is important that:

--the mother's health and nutritional state be sound at the time of conception,

--the mother remain free of virus infections while pregnant, especially during the first 90 days of the pregnancy,

--the mother's diet contain ample protein and vitamins,

--the mother have regular prenatal care to correct as quickly as possible any medical disorder that may occur, and also have adequate obstetrical care during and immediately following the birth.

Following birth, the newborn infant needs chiefly for his first two or three weeks:

--proper sanitary nutrition,

--clean clothing and repeated care for eliminational products,

- --proper temperature, and ventilation,
- --opportunity to sleep, and
- --adequate pediatric care in case of infections, nutritional disturbances, or other medical problems.

Adequate pediatric care is a continuing need throughout the early years. During the waking hours, the infant can profit from:

- --being handled and rocked,
- --having visual contact with a changing scene in which certain patterns, like that of the human face, appear and disappear repeatedly, or having objects within view to look at,
- --having a variety of different sounds in which, also, certain patterns--like those of the human voice--occur repeatedly.

During these first two or three months of development, the human infant is chiefly responsive to his own internal needs and to changes in auditory, tactual, and visual stimulation. Without these changes he vegetates and his development is retarded. Even so, much earlier than has been believed heretofore, the infant acts to achieve ends of his own that he has learned to expect from the redundancy in the patterns he has experienced. At this state he needs:

- --circumstances that fulfill his expectations when he acts, at least a fairly high proportion of the time,
- --arrangements that call for new ways of achieving the expected ends, this is to say, new contingencies between action on the infant's part and

circumstantial events that he anticipates,

--play with caretakers, for it is probably in play that the infant has the most natural opportunity to obtain expected events through a variety of actions on his own part,

--an opportunity to hear vocalizations and to get responses from others with his own vocalizations, and, of course,

--continued general protection with hygienic physical care and nurture.

As an infant develops the imagry that gives the objects permanence, it is important that:

--he have continuing contact with persons and places and things, for these are essential in providing emotional security and in avoiding what has been called "separation anxieties," and

--when abrupt change in his circumstance is necessary, it is important to arrange for continuing contact with as many of those circumstances as possible.

As a child develops locomotion and ways of manipulating things, it is important that the child have some space where he is free to move about as he wishes,

--that the child have a variety of things that he can manipulate, and

--that the child's parents or caretakers respond to his demands with something other than "don't" and, instead, suggest new places to go or things for him to manipulate.

As a child begins to imitate the actions of others, it is important that

--he should have available some models of action nicely matched to his own capacities which are sufficiently novel to be interesting to him,

--he should have models of speech which are articulate and clear, and models of grammatical syntax.

As children develop the conception that things can happen in the future, their development depends upon the dependability of things expected, so it becomes important that

--their schedule of events be relatively stable,

--promises to them be kept, and that

--deviations from the established schedule be explained.

As the child develops the use of language, it is important that parents or caretakers provide situations in which the child has an opportunity to use language and to respond to language. Language skills are essential in the development of those cognitive functions that comprise intelligence and, in large part, underlie competence. It is, therefore, important for a child at this phase of development to have opportunities:

--to name the objects and pictures within view, or that are indicated by sounds heard,

--to be told in sentences what he is doing as he does it,

--to be asked to say what he is doing as he does it,

--to be asked to follow instructions, which include prepositional relationships,

--to have stories read to him in dramatic fashion with appropriate emotional expression,

--to be asked to tell about events as a way of learning to organize experienced events in language by organizing the memory of past events in sequential fashion,

--to have his "Why?" answered with understandable descriptions of how things work or why decisions are being made.

The infant toddler or the very young child needs discipline, but discipline does not consist merely of demands for unreasoning obedience to commands which are reinforced by punishment. Instead, the discipline needed by the very young child, if he is to develop safely into a responsible person, should consist in:

--responsive recognition of the child's demands, needs, and wishes,

--organized schedules of activities that occur regularly at allotted times, interspersed with opportunities for spontaneous activities dictated by the interest of the moment,

--limits to the child's activities set gently but firmly and persistently with a minimum of either punishment or reward, for the existence of these latter leave the child largely unconvinced with the impression that he is behaving as requested, under duress, or for a price,

--explanations of changes in schedule and of why special decisions are being made,

--opportunity for the child to express his own wishes and have them considered in terms of their consequences in decisions to be made.

Children of two, three and four are learning their roles in life, and it is important for them to have

--models of the behavior of parents of both sexes to imitate and emulate (See Bronfenbrenner, 1966),

--older children of both sexes to observe and imitate,

- --adults working and playing in a variety of roles for observation and imitation, and
- --opportunities to observe people reading for fun, and to hear them discuss what they have read with enjoyment.

While few parents continuously provide all of these environmental circumstances that foster developments in the very young, the parents in the slums typically fail in much greater degree to provide each of these various kinds of circumstances.

The Nature of Slum Rearing.

The mothers of slum children are less likely than those of the middle class to be properly nourished and in good health at the time of conception. Not only is the incidence of such prenatal and perinatal complications as prematurity, bleeding, and toxemia considerably higher in mothers from low socioeconomic status (Lilienfeld, Knobloch, and Pasamanick, 1956; Montagu, 1962), but the fatigue, uncertainty, and the unesthetic quality of life in slum circumstances inevitably leaves parents and particularly mothers, with little of what it takes to cherish and protect their infant children for prolonged periods (See Lewis, 1966).

Once their children are born, such parents are commonly unresponsive to their infants, and they respond to the demands of their young children chiefly with irritation. In the worst of these homes, where a mother may have withdrawn in defeat or be unable to provide proper care while she is away working, very young infants may suffer the same unchanging conditions and unresponsive neglect that has characterized orphanage environments like that in the Iranian orphanage where 60% of infants in their second year still failed to sit alone, and 85% of those in their fourth year still failed to walk. When the most common parental response to their children's demands and questions are irritation, the children learn chiefly to avoid the punishing irritation. Thereby, they avoid the models from whom they might learn something by imitation.

In slum settings, children seldom get asked questions that require them to use language to describe past events or to explain how things work. Seldom do they hear articulate language spoken. Seldom do they see anyone whom they know in the act of reading or discussing something read. Their own "Why?" questions are disregarded or even punished. To be good is to be quiet vocally and inactive motorwise. It is hardly surprising, therefore, that various investigators are finding that children from the slums are typically quite retarded in the development of language (See, e.g., Anastasi & D'Angelo, 1952; Bernstein, 1960; Cynthia Deutsch, 1964; John, 1963).

The child-rearing of parents in the slums, and of especially the very poor, as compared with the child-rearing presumed to be desirable and more characteristic of parents in the middle class appears in the following table, adapted from Chilman (1965, 1966), which is based on a number of studies (See for review, Bronfenbrenner, 1966).

Child-rearing and family-life patterns reported to be characteristic of the very poor.	Child-rearing and family life patterns reported to be conducive to successful adaptation to our predominantly middle-class society.
(1) Inconsistent, harsh, physical punishment.	(1) Mild, firm, consistent discipline.
(2) Fatalistic, personalistic attitudes, magical thinking.	(2) Rational, evidence-oriented, objective attitudes.
(3) Orientation in the present.	(3) Future orientation, goal commitment.

(4) Authoritarian, rigid family structure--strict definitions of male and female roles.	(4) Domestic, equalitarian, flexible family structure.
(5) 'Keep out of trouble,' alienated, distrustful approach to society outside of family, constricted experiences.	(5) Self-confident, positive trustful approach to new experiences, wealth of experiences.
(6) Limited verbal communication, relative absence of subtlety and abstract concepts, a physical action style.	(6) Extensive verbal communication; values placed on complexity, abstractions.
(7) Human behavior seen as unpredictable and judged in terms of its immediate impact.	(7) Human behavior seen as having many causes and being developmental in nature.
(8) Low self-esteem, little belief in one's own coping capacity, passive attitude.	(8) High self-esteem, belief in one's own coping capacity, an active attitude.
(9) Distrust of opposite sex, exploitive attitude, ignorance of physiology of reproductive system.	(9) Acceptance of sex, positive sex expression within marriage by both husband and wife valued as part of total marital relationship, understanding of physiology of reproductive system.
(10) Tendency not to differentiate clearly one child from another	(10) Each child seen as a separate individual and valued for his uniqueness.
(11) Lack of consistent nurturance, abrupt and early granting of independence.	(11) Consistent nurturant support, with gradual training for independence.
(12) Rates of marital conflict high, high rates of family breakdown.	(12) Harmonious marriage, both husband and wife present.
(13) Parents have low levels of educational achievement.	(13) Parents have achieved educational and occupational success.

From this listing of comparisons between the child-rearing typical of poor families living in the slums, it is evident that the opportunities of slum children to develop their hereditary potential are far less than the opportunities of children of middle class families.

Omitted from the list of differences is the common absence of fathers from poor Negro families. The stability of marriages is low through the world in poor families, but the stability of marriages among American Negroes is especially low as a consequence of the Negro's prolonged period in slavery. In slavery, spouses were commonly separated through sales of one or the other to new owners. In the course of adapting to the condition of slavery, the Negro family tended to become centered on mothers. As Negroes improve in their economic and social status, they take on many of the standards of middle-class culture. But where they remain very poor, fathers are slow to take on consistent responsibility for their spouses and children. This fact of life has mitigated against little Negro boys having an opportunity to acquire both competence and the attitudes of responsibility for families through the natural process of imitating their fathers (See Bronfenbrenner, 1966).

In such slum settings, children get few experiences that lead them to hope for more in the future than they have today. As Lewis (1966) has noted in his description of "the culture of poverty," children come to distrust the future and to live entirely in the present. They acquire little disposition to postpone immediate gratification in the hope of greater gratification in the future. Knowing only their own highly limited circumstances, they not only fail to develop intellectual competence, but they develop feelings of fatalism, helplessness, dependency, and inferiority. While they become exceedingly sensitive to symbols of status, they acquire little consciousness of class and little skill at social organization. Having thus acquired little of the wherewithal to cope with life in our highly industrialized society, they face chiefly frustration and are ready-made for disorganized explosions of mob violence.

Indirect Approximations of the Consequences.

A rough estimate of the degree of damage to competence that can be expected from such circumstances in early life can be gleaned from a recent study by Dennis (1966). The measurement comes in the familiar terms of the IQ based upon the Draw-a-Man test of Goodenough (1926). This test was originally considered to be "culture-free," but this supposition began to be doubted when Hopi Indian boys, aged 8 to 11 years, were found to be superior and to have an average IQ of 123 on this test. Dennis has found the average IQ's for samples of children from various cultures ranging from 53 for children of the primitive Shilluk tribe of the Sudan and 56 for nomadic Bedouins to above 120 and up to 125 for the Hopi Indian children and for various samples of children in America and Japan. The range between 53 and 125 is an astounding 72 points. In this particular case, the difference appears to be largely a function of experience with the graphic arts. Where the Shilluk and Bedouin children encounter almost no pictures and have no practice in making them, Hopi Indian children are highly familiar with sand paintings and have much practice in making them. Moreover, the graphic arts are highly prevalent in the experience of young children reared in the cultures of both America and Japan.

The particular kind of circumstances that show pertinent variation among the cultures in which children vary in average IQ on the Draw-a-Man test, hardly corresponds to the circumstances which differentiate the experience of children of the slums from that of those in the middle class. Nevertheless, the fact that the effect can be 72 points of IQ, even as measured by this test, indicates that it is no longer tenable to attribute the observed differences between classes to differences between them in hereditary potential.

Neither can the observed differences between the races be attributed to differences between them in hereditary potential any more than one can attribute to hereditary potential the difference between the ignorant, inarticulate, superstitious European peasants of the eighteenth century and their informed, articulate, and relatively unsuperstitious descendents now living in America as college graduates with professions.

While it is not yet possible entirely to rule out some differences among the classes and races in hereditary potential for intelligence and competence and for various other characteristics, those actual differences now to be observed are so highly contaminated with highly damaging environmental circumstances early in development that they must not be attributed to an unmodifiable heredity.

It is quite clear that the equality of opportunity which our forefathers declared to be an inalienable right is at best an ideal. As of contemporary actuality, it is but a myth.

C. The New Importance of Competence

America has entered a new epoch which has greatly enhanced the value of intellectual competence. The new epoch is based on a new spurt in the industrial revolution. It stems from the invention of machines that monitor themselves and of electronic computers that not only hasten arithmetic operations but even solve logical problems. These technical developments have greatly decreased the demand for people capable only of routine tasks. Ditch diggers have given up their usefulness to bulldozers. Factory hands are giving up their usefulness to automated machines. A large share of farm hands have lost their place to the new farm machinery. Even demand for routine clerical workers is fading before the new office machines.

Simultaneously, demand has increased markedly for people who can cope with complex machines, with electrical circuits, with various tasks and professional skills that are not routine. For those who can compute, who can use language with skill, who can solve problems, and who are motivated to carry responsibility, opportunities abound. The opportunities number many more than the people prepared to fill them.

Although change has been the watchword for a century, never has it been more rapid than it is now. Our age is committed to innovation and novelty. Those who have learned a set of skills may within a decade be faced with obsolescence unless they can readily acquire a new set of skills. Ability to learn and to change with the changes in circumstances that come with each new innovation in our increasingly technological culture is required for participation in our society. In this context, the young face new difficulties. It is no longer enough for them to acquire a few key skills and a set of static traditions and values. Since skills are in such constant flux, what was good enough for father dare not be good enough for son.

Coincidentally, America's parents and schools face a new kind of problem. No longer is their task merely one of passing on a culture. They must teach the young how to learn and how to cope with change. If the rate of innovation continues, as it almost certainly must through the foreseeable future, adaptation in our culture will call for a level of competence never before demanded in the history of the world. If the young care to participate in the main stream of society, if they are to enjoy life in this context of continuing innovation and novelty, they must acquire not only the capacity for learning but also a love of learning.

The goals of child rearing in every epoch have reflected the values which emphasized the particular challenge of that day.

--The child rearing and schools of Sparta aimed at providing good soldiers.

--In the days of the Roman forum, the schools saw their tasks as producing orators.

--With the rise in trade that followed the Crusades at the end of the middle ages, schools were created to teach writing and cyphering or arithmetic so that commercial records might be kept.

--After the Reformation, Martin Luther founded schools to teach reading so that the young might have direct access to salvation through the biblical word of God.

Our technological innovations have created the challenge of our epoch. This challenge puts a new emphasis on the importance of the ability to learn and on love of learning.

This new emphasis on the value of competence is still in process of becoming appreciated. It represents a substantial shift in emphasis from that on emotional and social adjustment which has dominated the past 30 or 40 years. A debate continues between those who speak of the goal of child-rearing and education in the terms of preventing emotional disorders and emotional or neurotic maladjustment and those who speak of this goal in terms of fostering the cognitive or intellectual development and the motivation for achievement that underlie competence.

It must be said that new value-emphases do not obliterate the importance of values emphasized in earlier epochs. The moral responsibility stressed in the nineteenth century remains important. It is gaining new consideration as a consequence of the recent violent outbreaks from students and also from the role of learning in the child-rearing process. Punishment and discipline are receiving renewed attention. So too, much of value remains in the concept of mental health. Emotional or meurotic maladjustments interfere with learning and all too often make the individual vulnerable to changes in circumstances that should be coped with easily. Nevertheless, the increasing rate of technological innovation forces upon us the new emphasis on competence. Full participation in the main stream of American society calls today for a higher level of competence than has ever been required before in the history of man.

D. The New Increase in the Rate of Urbanization

Despite the new challenge from our commitment to innovation and novelty and the increase of importance it puts upon competence, ability to learn, and love of learning, a very large share of America's children face a world in which the circumstances make it more difficult for them to acquire the experiences through which intellectual competence develops than it was for their parents. The industrial revolution on the farms coupled with the tremendous productivity of the American economy have produced a new increase in the rate of urbanization. The very industrialization and urbanization, which have brought so many economic benefits, have, at the same time, deprived children of many routine contacts with their parents and with responsible adults at work and at play. It was in the course of these routine contacts with parents and other adults that children once got the experiences that produced both competence and attitudes of responsibility toward their role in society.

In rural areas and in small towns, people lived typically in extended families in functioning neighborhoods. The young were cared for not only by their own parents, but also by relatives, friends, neighbors, older children--in a word, by the entire community. Everyone in the neighborhood knew the local children, and they did not hesitate to intervene in what they regarded as their behalf. The children, in turn, came to know and to become attached to a large number of people of different ages, attitudes, and occupations. In a very real sense, the world of a child from a rural or small-town setting is the entire community in which he lives (See Barker & Wright, 1954).

All this changes with migration to an urban center. Urbanization typically reduces the extended family to a nuclear family with only two adults. The functioning neighborhood withers to a small circle of friends often inaccessible except via the bus or subway. Where the world in which the child lived in the rural area consisted of a diversity of people in a diversity of settings, the urban world of the young child of migrant parents is all too often limited to the apartment in which he lives or the block on which he lives.

For those of only marginal employability, matters are worse. If the family is fortunate enough to find housing in one of the low-rent housing projects, these have no stores, no shops, and the child sees few adults at work. It is into this sterile world that many of our current migrants from rural areas go when their meagre skills are no longer demanded on the farms. In the new urban developments, the number and variety of situations which children encounter are greatly reduced over those encountered by children in the rural areas or small towns from whence they came. Moreover, the few adults who participate in these new sets of circumstances play only restricted and often very pallid roles.

One consequence of this shift to the urban environment, as it exists for many recent migrants from the farms and rural settings, is a net reduction in opportunities to learn the skills that comprise competence in the ordinary course of each day's events. The urban child of families in poverty or near poverty is not unlike a cage-reared dog, and lack of ability to learn is the result.

Another consequence of the loss of regular and repeated, daily contacts with adults at work and at play is the increased role of the peer group in child-rearing. During the hours that children are not in school, they live almost totally in the company of other children approximately their own age. Each child acquires his conception of himself from the opinions in which his peers hold him. Children thus acquire their values chiefly from their own narrowly oriented and uninformed peer group. All too often the values acquired are the antithesis of those held by the adult community and of those required for organized society.

These consequences of life in urban circumstances pose the most serious threats to the development of urban children, and especially to those of families in poverty. These alienating urban circumstances make it especially difficult for parents to function as parents. They need the support of fellow men with whom they can share their parental responsibilities; they need the support of fellow men jointly involved with them in enterprises for the common good.

It is in the light of such considerations that the Task Force contends that it is not enough merely to supply the services which these families need so desperately--medical, economic, educational, and social. Rather, these services must be provided in such a way as to restore the family and the neighborhood as constructive forces in the lives of children.

E. Critique of Existing Efforts

The Task Force has undertaken no systematic critique of the various existing programs of effort to foster the development of children, especially those of the poor. Yet, in the course of developing the program of recommendations made in this Report, various points of critique have been made and generally agreed upon. These we report.

Historical Context

Again, a few words about historical context may be useful. During the nineteenth century, western man extended his efforts to help the poor beyond mere alm-giving. The industrial revolution separated men from their tools of production. It also served to concentrate the poor in urban slums near the factories that contained the new tools of mass production. This concentration made both the evidence of poverty and its evils more noticeable. One result consisted in efforts to improve the condition of the poor. In the 1840s, for example, some of the leading citizens of New York City formed an Association to Improve the Condition of the Poor. This association endured for a century, and it terminated its corporate existence in a merger with the Charity Organization Society, also of New York City.

In the mid-nineteenth century, moral character was the value receiving chief emphasis. In the words of Horace Greeley, "Fame is a vapor, popularity an accident, and riches take wings. Only one thing endures--character." Presumably the poor were poor because they lacked moral character. The first efforts to improve their condition consisted chiefly in using education, in the form of moral advice, along with the more substantial contributions of food, clothing, shelter, and financial support--the traditional alms. Although such efforts persisted for half a century here and there, the leaders of philanthropy soon turned to efforts aimed at improving health and at concentrating the variety of philanthropic efforts to maximize their usefulness to the recipients. Out of these efforts came the public-health movement, the Charity Organization Societies, and the neighborhood-settlement houses.

It gradually became evident to many, moreover, that the industrial revolution's separation of the worker from his tools and its attendant business cycles removed much of the individual's responsibility for his poverty. With this realization came the theory of economic determinism. This theory led to proposals of various schemes of income maintenance. These schemes encountered both the misgivings of the moralists and the outright opposition of those who believed that people will not work if they can obtain the necessities of life without working. Nevertheless,various European countries adopted schemes of income maintenance, and during the great depression of the 1930s, the United States Government, under Franklin Delano Roosevelt's New Deal, undertook such responsibility in the legislation which established the Federal Social-Security Administration.

For the most part, our existing programs for improving the condition of the poor have their origin in the legislation passed originally in the 1930s. In the meantime, American productivity has increased tremendously. Americans are prosperous beyond the fondest dreams of their forefathers. Yet, a third of America's families still live in poverty. Realization has been increasing that income maintenance alone, at least in its existing form, may neither protect the young nor foster in them the development of that competence, motivation, health, hopefulness, and responsibility required to cope with life in our increasingly complex technological culture.

The behavioral and biological sciences have established that the circumstances of early development are highly important in determining the later health--physical and mental, competence--intellectual and motivational, social responsibility, and humanity of individual persons.

The behavioral, medical, and social sciences are establishing that the circumstances encountered by the children of the poor are exceedingly hampering to their later health--physical and mental--and to their later intellectual competence and motivation and achievement.

From these new facts, it follows that something effective must be done to improve the opportunities provided the children of the poor to develop those qualities which permit their full participation in the main stream of American society. In all likelihood, seldom do the opportunities provided any child develop his full hereditary potential. Improving the quality of American life calls for improving the circumstances of both early child development and later education for all children. Yet, it is the poor, and especially those alienated poor, with employability which is but marginal or less, who demand first attention.

It is their children whose opportunities during pregnancy, during infancy, and during childhood are least. It is their children for whom we already have the knowledge of early child development required to make improvements.

Medical Care

The chief defect of medical care in America is the inadequacy of its distribution. The inadequacy of medical care for children of the poor is attested by a variety of facts.

--The rates of child mortality in the poorest counties of the United States are 150% that of the average for the country as a whole and 200% of those in the most well-to-do counties.

--The rates of child mortality are highest in the poorer regions of the country--the South Atlantic, the East South Central, the West South Central, and the Mountain areas.

Race differences tend to be exaggerated by the relatively greater inadequacy of the medical care received by Negro children than by white children. On the average, Negro families are considerably poorer than white families. This difference in economic status has a number of associated medical disadvantages for Negro children as attested by such facts as:

--The rate of deaths at birth (perinatal death rate) among Negroes is about 200% of that among whites.

--The rate of infant mortality (deaths during the first year of life) among Negroes is about 200% of that among whites.

--The rate of deaths from accidental causes among Negroes is 250% that among whites.

--The rate of deaths from influenza, pneumonia, and bronchitis--all treatable diseases--among Negroes is approximately 300% of that among whites.

--The rates of deaths from diseases of the central nervous system and of the digestive system among Negroes are approximately 200% of those among whites.

All of these facts refer to rates of death. While they may be indicative of other relative disadvantages in the medical care which Negroes receive, they do not directly concern conditions that limit the development of capacity. Such facts as the following, however, are directly concerned with such conditions.

--The rate of premature births is higher among Negroes than among whites, and prematurity is often associated with damage to the central nervous system that, in turn, damages intellectual potential (See Pasamanick, 1962).

--The rates of such disorders of pregnancy as bleeding, toxemia, infections, malnutrition, and non-specific stress factors are higher among the poor, and therefore among Negroes, than among the well-to-do, and therefore than among whites. These conditions have all been found to be associated with damage to the central nervous system that hampers intellectual development and raises the incidence of various nervous disorders (See Pasamanick & Knobloch, 1965).

Chronic diseases go untreated. Although few hard data exist on the incidence of chronic conditions in childhood, two studies indicate that more than half of the children with such conditions get no medical treatment.

--A study in Pittsburgh indicates that 57% of those with chronic diseases and disorders are receiving no medical care.

--A study in Rochester indicates that 53% of those children with chronic diseases are receiving no medical care (Yankauer Study, mentioned in a report of the Child Health Studies Branch of the Division of Research of the Children's Bureau, July, 1966).

Our whole society pays a toll for these unhealthy and crippled children who go on without medical care. This toll is paid not only in human suffering, but also in medical and hospital bills, in the cost of special educational institutions for the handicapped, in the spread of disabling diseases, in prolonged periods of education, in a high medical rejection rate for service in the armed forces, and in loss of productivity.

Programs of Income Maintenance

Our existing programs of income maintenance have serious weakness for the development of the young. As they now operate, the programs are not calculated to foster hope, confidence and initiative in parents. Public Welfare and unemployment insurance provide barely a cushion against want of the direst physical necessities. This, indeed, is something essential. But unfortunately, in the case of those people of marginal employability, this cushion approximately equals their capacity to earn in the labor market. When such people are "on relief" and then find work, the income from the work is subtracted from their welfare allotment. In this arrangement, it becomes almost impossible for them to improve their situation. All too often, they simply give up. Unfortunately, such parents not only fail typically to provide the circumstances in which their children can develop the ability and opportunity to learn that constitute competence, but they tend also to pass on their own hopeless attitudes and loss of motivation. Thus, the next generation follows the same pattern. The pattern is a matter of cultural inheritance, however, rather than one of biological heredity.

As the laws for income maintenance are now written, moreover, those who administer these programs cannot function as helpers of their clients. Instead, they must devote their energy and attention to determining, in considerable detail, whether the client is eligible for the assistance he is to get. The process is demeaning for the client. It tends not only to destroy the client's self-esteem, but it also wastes the precious time and effort of those who administer the program. They might better be doing something constructive for the families they serve.

Aid to Families and Dependent Children (AFDC) is grossly inadequate.

--Monthly payments average over the country $35.06 a person. They range from a high of $51.47 in states like New Jersey, New York, and Massachusetts to a low of $7.90 in Mississippi. A mother and two children can receive no more than $155 a month, and she may have to get along on as little as $24 a month (Social Security Bulletin, 1966, 29, No. 11).

--In July of 1966, 3,385,515 children were living in families supported by AFDC (ibid.).

Families cannot rear children with diets adequate for health or circumstances that can bring out potential on such low payments. Such payments make the Government itself a perpetuator of poverty by producing children who become parents who cannot rear their children successfully.

Also, the institutional arrangement for AFDC operates to stifle hope and enterprise.

--AFDC was planned during the 1930s when the aim was partly to keep women out of the labor market. Now when the payments are inadequate, if a mother enters the labor market, her earnings are typically deducted from her payments. As Schorr (1960) has put it, "The operation of the AFDC program removes from the mother the effective choice of whether she will or will not work to supplement her income."

With this loss of effective choice go also hope and enterprise. All too often this loss of hope and enterprise are communicated early to the mother's children only to be repeated in the next generation.

AFDC can also have an unhappy side-effect of helping to destroy families (Schorr, 1960). AFDC was planned for families from which the father is absent. Of the 50 States, only 22 have changed the legislation to permit AFDC to go to families with fathers present. A father's marginal employability often leads to marital strife. When his earnings fall below what mother and the children can obtain from AFDC, he becomes expendable. Thus, this institutional arrangement of AFDC, in 28 States, decreases the stability of even the nuclear family. Children are left without fathers; sons are deprived of a male model. Both sons and daughters are left without the person who typically fixes and makes things and who can, thereby, foster the development of intelligence and competence for work by showing how things work. If we wish to foster the stability of the family, it is highly important that these 28 States amend their laws to allow aid to go to families with the father present.

AFDC has yet another unhappy side effect. Under certain circumstances, it may encourage an increase in the number of children a mother will bear. With the hope of economic betterment gone, sex provides one of the few pleasures available. In the situation of these women, with their typical life histories, it does little good to prate about morals. When such women have only one or two children, they still have hope of finding a man who will provide adequately for them. The experience of the Planned Parenthood Clinics indicates that when such women have only one or two children, they are highly motivated to get and use family planning techniques. On the other hand, once a mother has had four or five children, not only are her hopes of another marriage usually gone, but her daily life has become so limited that she has neither the motivation nor the free time to seek help in family planning. Moreover, the threat of an additional infant does not loom large under such circumstances because an additional allotment will keep it from starving. Such women have usually lost much of their ability to direct their own lives. Children born into this kind of setting are extremely likely to fall among those who become alienated from the mainstream of our society.

It is easier to state a criticism than to describe appropriate correctives. Various members of the Task Force have suggested that it is time for America to establish a basic standard for income maintenance beneath which no family is forced to exist. It might well be less expensive for our society, in the long run to set such a standard and yet allow the members of the family to better their condition by earning in addition what they can in the labor market.

What is also needed is a way to get the hopeless ones involved in enterprises that will help restore hope and will provide them with some sense of interest and approbation for mothers that can be lost by misbehavior. What is also desperately needed are ways of influencing their children so as to avoid the most adverse intergeneration effects.

Child Welfare Services

The present pattern for child-welfare services has many serious weaknesses. The most serious weakness is simply the lack of sufficient volume of services to provide coverage. Several States have had to refuse service to unmarried mothers and their children for lack of funds. Suicides, black-market sales of babies, and abortions are the consequences.

--In New York City, as many as 1500 children wait in hospitals because no foster homes or institutional beds are available for them.

--Chicago has scores of children who are free for adoption but for whom homes cannot be found because there are not enough social workers to look for the homes.

--Some 40% of American mothers work. About 60% of the mothers in poverty work. There are 4,000,000 children under six whose mothers are employed. Even so, facilities for the day-care of the children of working mothers exists for only somewhat over 200,000 children in the entire country. Other evidences of the lack of sufficient volume can be added indefinitely (See Reid, 1966).

Almost equally serious is the low quality of most of the child-welfare services provided.

--Although such services are now provided through all public-welfare departments in the United States, trained child-welfare workers are available in only approximately 50% of the counties.

--The low payments provided for foster parents fail to attract but a limited supply, and those attracted all too seldom have the information or personal qualities necessary to foster adequately the development of very young children.

--Institutions for dependent children without parents are crowded, and the personnel is largely untrained for the task of caring for the children.

This state of affairs exists because needs of dependent children are not well known. Dependent children have few spokesmen. They have no lobby to defend their interests. They do not vote. For those people in need of help who do vote--the aged, the disabled, the widowed, the unemployed, the blind, and the sick--the Federal Government shares the cost of public assistance programs with State and local governments. But no fixed share is contributed by the Federal Government for the care of dependent children.

In 1959, President Eisenhower appointed an advisory council composed of distinguished citizens and leaders from business, law, and three major religious groups. After studying the conditions of children, and the ability of each State to finance more and better child-welfare services, they recommended that the Federal Government share child-welfare costs of State and local governments, that for the poorer States the Government should pay more than 50% of the costs, and for the richer ones somewhat less. Overall, they advocated an average of 50% of all public-welfare services should be raised through Federal taxes. Were such a law drafted so that the States could not cut back their own expenditures and would be required to use Federal money to improve and extend their child-welfare services, its passage would mean much to help our dependent children.

In 1962, following another study of public-welfare needs, Congress amended the Social Security Act to include the following mandate:

> By July 1, 1975, the child-welfare services must be available throughout every State to all children who need them.

Noble as this mandate is, it is only pious hope until Federal money pays the cost to give it reality.

In the light of such illustrative findings as those in the study wherein Skeels found such low adult status of individuals who had been left as infants and children in a State orphanage and such relatively high adult status of those who had been transferred as infants from the State orphanage to a school for the mentally retarded and later adopted, mounting the cost should be a saving in the long run.

Fragmentation of Services

The ineffectiveness of services that results from lack of coordination among educational, health, and welfare services at the local level has been apparent for nearly a century. The Charity Organization Societies organized in the 70s and 80s of the last century aimed specifically at this problem. Yet, almost a century later, our educational, health, and welfare services are still fragmented. People must go to differing agencies, with differing policies, and differing procedures. These agencies are spread out geographically. Usually they are far from where families live.

This fragmentation of services not only discourages use of them, but decreases the effectiveness of their operation. In the earliest years, it is essentially impossible to provide for adequate childhood education unless the physical and emotional needs of the child are taken care of. Similarly, any sensible approach to the welfare of an infant or a young child must take into account his need for adequate nourishment and intellectual stimulation as well as his basic health needs.

Fragmented services typically result in clients being seen only as units who receive particular services. They do not get seen as people with a variety of needs in their larger family and neighborhood contexts.

In the context of this fragmentation, it is exceedingly difficult to give the young child a continuity of experience with people he has known from infancy onward. Such continuity is important for having to break off relationships and start new ones hampers development. Various lines of investigation indicate that frequent breaks in children's relationships interferes with their emotional development and particularly with their acquiring those standards that underlie ethical behavior and concern for others (See II-A, p. 34ff).

Fragmentation of children's services is equally unfortunate at the Federal and State levels of Government. Children do not vote. Those parents least able to give children what they need to develop adequately are also least cognizant of their children's needs.

At the Federal level the leadership required for change is unlikely with the support for children's services buried in such a variety of agencies as the Public Health Service, the Social Security Administration, and the Office of Education. No administrator of high status has responsibility for the overall needs of children, and especially for the needs of children under six years of age. The administrator of Children's Bureau is several steps down in the bureaucratic hierarchy as are also the directors of the National Institute of Child Health and Human Development and of the Head Start Program. What is needed to improve the lot of children from the Federal level to the neighborhood level is a new unit in the Department of Health, Education, and Welfare charged with the overall welfare of children as its single concern. What is needed is a new unit that is administered by someone with imagination, persuasiveness, and practicality, who is knowledgable of the needs of children and especially of children under school age.

"Doing for" People

The tendency is strong for those who offer professional services to try to "do something for" people upon their request. Social case workers, in the days of Mary Richmond, entered the homes of people to help them with their various needs. Under the influence of the psychoanalytic movement, social caseworkers changed their view of their role to that of a professional who remains in his office and waits for those who seek help to come to them. In part, this change of approach derived from realizing that the person to be helped must take some initiative for the help needed and wanted. Unfortunately, this approach leaves unaided most of those who most need help in their child rearing.

The tendency is also strong to attempt to change people by counseling them. This tendency has been represented in the moral counsel of the philanthropists of the mid-19th century. It has been represented in recent years in the attempts to help people through counseling or psychotherapy. In some instances, where the problem is one chiefly of emotional disturbances, such an approach is not entirely without merit.

On the other hand, various demonstration-experiments aimed at improving the child-rearing practices of those mothers in poverty by counseling them have failed quite completely. Then again, another demonstration-experiment by Professor Susan Gray of Peabody College in Nashville, Tennessee, also financed by Federal funds, has aimed chiefly at fostering intellectual competence in the children of poor families and it has obtained some unexpected results that point the way to a more effective approach. Fortunately, as part of this Early Training Project which has now been underway for five years, the mothers of the children in the project were involved in a preschool program as teachers' helpers.

In their role as helpers, these mothers were shown films on the management of children; they had opportunity to see the consequences of the practices of the teachers with whom they worked and to compare them with those of their own practices, and they got instructions on the management of youngsters while they were in the process of managing them. Moreover, these mothers were visited in their homes by specially trained home-visitors who taught them, by example, such mundane things as how to read a story to a two-year-old, how to teach a child to recognize colors by name, how to see similarities and differences, and how to reinforce children to improve their motivation to achieve.

This project has been quite effective in fostering the intellectual development of the children in the program. Moreover, as an unexpected dividend, gains were also found in the younger siblings of the children in the project. Even more exciting, gains in various measures of intellectual development were found also in the children of neighboring families that were originally planned as control subjects. Such gains did not appear in the children of similar mothers in a near-by town who could not communicate with the mothers of children in the Project. Such findings suggest that involving members of a neighborhood in the operation of such group-care facilities as day-care and educationally oriented nursery-school, may gradually do a great deal to modify the child-rearing practices of a whole neighborhood.

Such an approach is very different from that of giving some specific service on request. Professional personnel is in far too short supply to do the work needed by any approach. But, the numbers of professional persons in welfare services could never be expanded to the point where they can "do for" children in very early educational, health, and welfare practices, what parents could do for their own if they were taught how.

Lack of Services to Develop Competence

The idea of services to help parents to provide those circumstances that foster, during infancy and early childhood, the development of intelligence, of proficiency in language, of motivation to achieve, and of interest in solving problems, is something new under the sun. So long as the circumstances of early child development were considered to be irrelevant to the development of competence, such services were inconceivable. In fact, the idea of using Federal funds for such a purpose as recently as 25 years ago, would have been as unthinkable as using Federal funds to develop a means to get to the moon.

While intellectual development and that emotional development considered essential in mental health are inextricably intertwined in infancy and early childhood, the traditional approaches in nursery schools and kindergarten have never given an adequate place to the fostering of intellectual competence. One reason derives from the founders of the movements that resulted in kindergartens. Froebel, the German founder, saw behavioral development as automatic. All one needed to provide was the opportunity for the activities that children would engage in spontaneously. G. Stanley Hall, the founder of the Child Study Association in America who helped to establish kindergartens here, based his approach on a firm belief that each child must go through each of the stages in his own development that the race has gone through in the course of its evolution. He taught with parables. One of his favorite parables was that of the tadpole's tail. Cut off the tail of a tadpole and the back legs will not develop. From this he drew the inference that one should interfere with no activity of any child lest one damage his future development. The kindergarten movement of Froebel merged with the Child Study Association in the 1890s in an effort to promote kindergartens at public expense.

Nursery schools began in the U. S. shortly after World War I. They expanded rapidly during the 1920s with the establishment of numerous institutes of child development, usually under University auspices and often with funds from the Laura Spelman Rockefeller Foundation. Some of these nursery schools were domiciled in departments of Home Economics, while others were in colleges of education or in departments of psychology, and some in public-school systems. All were broadly concerned with physical and motor, mental and social aspects of child development which provided the outlines for the training textbooks. Free play was fostered with a rich variety of equipment which had been observed to stimulate independence in large and small muscle activity, problem solving, creativity and social skills. Since most of these nursery schools were provided for middle-class children already well-developed in language and concept-formation, it was not realized that other approaches might be necessary for the culturally deprived children of the poor. Thus, the movement neglected the contribution of Montessori to cognitive development through stimulation of perceptual differentiation and a program of visuo-motor skills. All of these basic contributions could readily be synthesized.

Inasmuch as the children of the poor are typically especially retarded in the development of proficiency in language and in various cognitive skills that underlie intelligence, as tested, the Task Force is convinced that the preschool programs provided for them should aim directly at overcoming their intellectual and motivational deficiencies. The children in these programs should also have access to medical services. Their visual defects should be corrected. Their teeth should be fixed. Their chronic diseases should be treated. Moreover, their parents should be involved in the educational program so that they have an opportunity to acquire improvements in their own methods of child-rearing. Project Head Start has attempted just such an integrated program of services with fostering intellectual development as a central goal. Kindergarten programs should be modified in the direction of Head Start.

The Research-and-Development Effort in Early Childhood

No longer can the importance of the first six years of children's lives for their later development be questioned. It is in this formative period that environmental circumstances heavily determine the degree in which children develop the neural structures and the basic skills necessary for the later development of complex ways of thinking. It is largely the experiences of these early years which lay the foundations for initiative, motivation to achieve, and --perhaps most important of all--a child's feelings and conceptions about himself and about other people.

Scientific investigations have not only established when these fundamental processes occur, they have also begun to identify some of the major conditions in the environments of infancy and early childhood which enhance, permit, or disrupt the development of hereditary potential.

Similar considerations apply to later stages of childhood in the school years. Although it may no longer be possible to enable an older child to realize all the potential he possessed at conception, at birth, or in the preschool period, findings from various investigations indicate that through enrichment of a child's experiences and appropriate structuring of his social environment, it is yet possible to remedy some of the effects of early deprivation and increase substantially a deprived child's ability and motivation to learn, his intellectual competence, and his capacity for personally-gratifying and socially responsible behavior.

Although these possibilities definitely exist, their realization is unlikely given the present level and nature of research in human development. Compared to the magnitude of support for research activity in the physical sciences (approximately $4.6 billion a year including that for space) and life sciences (approximately $2.0 billion a year including medical research) the current level of support for research on the psychological and social aspects of human development (probably less than $25 million a year, all told) is almost insignificant in amount.

The National Institute for Child Health and Human Development (NICHHD) was created specifically to launch a concerted attack on the unsolved health problems of children, and the current support of research on the significant problems of cognitive, or intellectual, and personality development is still exceedingly small. A significantly greater proportion of the investigations funded by the NICHHD is concerned with the biological and medical aspects of developing organisms. These investigations are commonly concerned with segmental, cellular, or sub-cellular levels of organisms and often with infrahuman animals.

Let us not be misunderstood. We in no way oppose support for these biological investigations. On the contrary, were they not being conducted, we should be demanding their urgent and extensive support, for they are essential to an understanding of the nature and the development of higher human processes. But, investigation of these biological foundations of behavior is not enough. The higher human processes must be studied in their own right and on a level commensurate with the emphasis now being given to their biological foundations. Indeed, an active collaboration of biological scientists with behavioral and social scientists is critical for genuine understanding of child development.

Several circumstances conspire to prevent the achievement of an adequate balance of scientific effort in this domain of child development. Some of these lie outside the purvey of government, but others are directly within its sphere of activity. The dearth of investigative activity on significant problems of intellectual and personality development in children is not due to lack of interest in supporting such research by the relevant Federal agencies. It is due rather to the acute shortage of personnel trained for such investigation and to the lack of facilities for carrying on such investigations. There is great need for Federal support for centers for research, service-innovation, and training focused specifically on problems of intellectual, motivational, and personality development in human children, and these centers need to be concerned with facilities giving service in neighborhoods near the universities. The NICHHD is authorized to grant funds for the establishment of other types of centers--for ageing and mental retardation, for example--but not specifically for research and for developing and testing the effectiveness of innovations in the arrangement of circumstances and in helping families to foster development in young children.

If all children are to benefit from the findings of the biological, behavioral, and social sciences, and if the children of the future are more nearly to realize their full hereditary potential for intellectual competence, mental health, humanity, and a full life, measures should be taken immediately both to increase the level of Federal support for research in early child development and to provide for a balance of investigative effort on the various aspects of early child development with that on their biological foundations. Specifically, achieving this balance means increasing support for research and development-innovation concerning the roles of nutrition, physical circumstances, and familial-social factors in the intellectual, motivational, and personal development of very young children.

F. Some Specific Problems with Suggestions for Action and for Investigation

In the course of both writing and discussion, the Task Force has examined a variety of specific problems faced by children and families in contemporary America. Various potential and promising suggestions for solution have been discussed, and certain issues for investigation have emerged. These we present.

Prenatal and Perinatal Damage

A growing body of evidence suggests that the importance of prenatal and perinatal influence on the development of the embryo and foetus may influence later physical, intellectual,and emotional development (See Montagu, 1962). Of particular importance in this connection is exposure of the mother to nutritional deficiencies, x-ray radiation, drugs, infectious diseases, fatigue, and emotional distress. All of these factors appear likely to be more damaging than was heretofore thought possible. Moreover, because of inadequate nutrition and prenatal care, an extraordinarily high rate of prematurity and other complications of pregnancy are found among various groups economically deprived in American society. As already noted, this is especially true of Negro families in urban and rural slums (See Bronfenbrenner, 1966), and several bits of evidence suggest that these complications produce neurological damage in the foetus which impairs intellectual function and produces behavior disorders. Especially relevant is the apparently significant goal played by prenatal and perinatal factors in the genesis in difficulties in learning to read. Finally, it is fairly well established, though not well understood, that neurological disorders from complications of pregnancy at birth, are more frequent for male than for female infants.

Suggestions for Action. Various services should be extended to expectant mothers to insure that they get more adequate nutrition and to help free them from physical, economic, and psychological stress. Concern for the welfare of children demands that these services be extended to unmarried mothers, most of whom are in the youngest age brackets, as well as to married mothers. The following forms of assistance deserve serious consideration:

--making available balanced meals, in packaged or frozen form, which might be purchased at low cost by mothers-to-be for themselves and their families,

--insuring economic security as soon as a pregnancy is known by providing economic benefits for a two-year period following knowledge of the pregnancy,

--having neighborhood Centers for Children and Parents would facilitate the providing of such services; in large urban housing developments, the Centers might best be located within one of the buildings near the center of the neighborhood; in rural areas they might be offered through mobile trailer units for public-health education which, in turn, might be staffed partially by local personnel of the same cultural background as the potential recipients of service; such service might also be provided through established hospitals and well-baby clinics,

--incorporating information on the importance and the availability of good prenatal care in educational entertainment for the women of the Center,

--incorporating this information on the importance to be taught in the upper grades and in high schools as part of a growing body of valid information for future parents.

Evidence has mounted in recent years to implicate exposure to x-ray radiation as a major cause of congenital defects. Most recent is the discovery that cumulative exposure to ionizing radiation is a major factor in the production of the trisomic chromosome No. 21 which, since 1959, has been identified a specific agent of mongolism (See Sigler, Lilienfeld, Cohen, & Westlake, 1965). The fact that other trisomic defects also show a correlation with maternal age suggests that ionizing radiation may be a general etiological factor in producing lethal and sub-lethal genetic anomalies (See Barr, 1964).

--In the light of these recently discovered facts, it is important to increase professional and public awareness of the dangers of exposure to x-ray radiation, particularly fluoroscopy, for impairing capacity to have normal children.

Suggestions for Investigation include the following.

--Various studies in recent years suggest that a large fraction of prenatal and perinatal mortality and morbidity is attributable to such chromosomal aberations as the trisomies, translocations, and deletions. The eminent human genetist, Curt Stern (See Newsweek, 19 Sept. 1966), has recently estimated that half of all spontaneous abortions and miscarriages are attributable to such chromosomal aberations. Moreover, where these aberations are compatible with life, they frequently give rise to mental retardation, sexual impotence, such specific defects as cleft palate. Although the causes of these chromosomal aberations are not yet fully understood, it is already clear that environmental factors such as exposure to ionizing radiation and to certain infectious diseases (e.g., hepatitis) play an important role. Other suspected influences include nutritional deficiencies, extremes of temperature or pressure, and--most recently--exposure to non-ionizing radiation as that radiating from radar installations or possibly from other high-energy electronic equipment such as television sets.

--In view of the debilitating consequences of most chromosomal anomalies, it appears essential to intensify research of the environmental factors producing these defects.

--The relatively greater vulnerability of males to the prenatal damage, which has its highest incidence among economically-deprived white and negro families, appears to be a significant factor in the educational and behavioral problems exhibited by lower class male children in school settings (See Bronfenbrenner, 1966).

- --It is important to focus research on the causes and prevention of this sex difference in susceptibility to congenital defects. Although the phenomenon of x-linked deleterious recessives probably contributes to this sex difference, it can hardly count for all of it.

Problems of family planning

Evidence indicating the importance of health and nutritional status at the time of conception and the importance of freedom from fatigue and emotional stress during pregnancy for avoiding prenatal damage to the child to come constitutes a mandate for family planning quite independent of the population explosion. Even though family planning is widely practiced in the United States, it is practiced least in those segments of the population which need it most. Moreover, experience in the slums of Chicago and other economically deprived areas has indicated that a large share of the women who need and would use family-planning techniques simply do not know about them or cannot afford them. Consequently hundreds of thousands of unwanted children are born. Not only do some of them suffer prenatal damage and receive inadequate care for themselves, butthey also reduce the already inadequate resources available for older brothers and sisters.

Suggestions for Action include:

- --Educational entertainment for neighborhood groups of women. Dramatic movies containing information about family planning presented at coffee klatches have been found to be an effective way not only of informing women, but of getting them to talk about family planning among themselves and with their friends.

- --Provide mothers with free information regarding the nature and availability of family-planning techniques in hospitals at the time a child is born; the objections of religious groups can usually be satisfied by including information on the rhythm method as an alternative while, at the same time, pointing out that it is less reliable than other methods.

--Provide information about the nature and availability of family planning to all couples at the time they apply for a marriage license.

--Give information about the existence of family-planning techniques and about where they can be obtained in the schools, for, since a substantial number of unwanted children are born out of wedlock--especially in the areas of hard-core poverty, about the only way to reach the potential progenitors of these children is through the schools. Information on family planning should not be presented in isolation, however, but as one item in a general program directed at preparing young people of both sexes for responsible and rewarding parenthood.

--Insure that family-planning methods are readily available to those who need them with a minimum of expense, red tape, time and distance. Outside urban, neighborhood centers, a likely method of supplying such a service is by public health units in mobile trailers that can be moved directly to the place where the client lives; such units should be staffed in part with residents of the area in the role of those who first meet the inquiring client to minimize cultural barriers.

--It is important to present information about family planning methods in a manner which preserves the dignity of those to whom the presentation is addressed. Experience indicated that the most successful educational materials are those which recognize the clients as persons who wish to be responsible for their children and themselves.

Suggestions for Investigation:

--The wide spread dissemination of methods for family planning, especially among unmarried young people, may have such unfortunate side effects as increasing irresponsible sexual relations which, in turn, serve to build denigrating attitudes toward those of the opposite of one's own sex. It is therefore important, in conjunction with such programs, to conduct research designed to examine not only their biological but also their psychological and social effects. Of especial importance would be any effects on young people that might influence behavior in marriage and child rearing.

Problems in the Care of Children in their own Families

Considerable public attention has been focused on the inadequacy of the home environments of the children in the families of the poor already described under II-B, p. 46 ff. above. This inadequacy was one of the principal reasons for the Project Head Start, established to provide supplementary enrichments of experience for these children _outside_ their homes. Yet, the best research available indicates that parents and the home remain the most important influence and that the home is potentially the best source of circumstances to foster optimal psychological development (See Blatt & Garfunkel, 1965). Even where many of the constructive influences described above (II-B, p. 40) are absent, it is usually not because the parents are unwilling to provide them as Susan Gray has discovered in her Early Training Project. The parents simply lack the proper strategies of child rearing, the knowledge of child development, and/or the economic resources, or some combination of all three factors. Making these available _in an acceptable form_ should do much to improve the environmental circumstances for their children, and especially for those very young.

Suggestions for Action. Programs of action can well take Project Head Start as a point of departure.

--Extend a program like Head Start into the homes of the poor. Attach to local Head Start programs a staff of home visitors who will enter the homes of the poor to play with the children there and to provide some of the enrichments there that are ordinarily available only at the Head Start center itself. Such an approach would teach parents new strategies by providing models for imitation. The limited experience available suggests that such an approach should receive wide acceptance and should provoke a demand from parents for educational toys, equipment, and books for their own homes. These should be made available at reduced cost.

--Such a program of home visits should pave the way for a wider acceptance by parents of such other parts of the Head Start program as medical and social services, and the visits would be maximally helpful if sources of health and social services could be located in the neighborhood with the educational center. Such an aim might be be achieved most readily and economically through the use of mobile trailers appropriately fitted for medical examinations and social services. Ideally, however, each neighborhood should have permanent quarters for an integration of the various educational, health, and social services for the families living there.

--The every-day problems in the care and upbringing of children represent a focus of common concern among families in a neighbhorhood. This common concern can well be utilized to reduce the sterile alienation so common in urban slums and housing developments. This principle was exploited for decades by county agents of the U. S. Extension Services. But the poor rural families served by these programs have long since achieved middle-class status and many have moved to town in the new spurt of urbanization. Many of these people are now as well informed as the extension agents who served them. These Home-Demonstration Units and Child Care Clubs once to be found in every town, village, or grange have been dying out. With appropriate modifications, they could be revived to useful purpose in both economically deprived areas, both urban and rural. An experimental program of this kind by the U. S. Extension Service should be considered for recommendation, but it would be essential to add to the staffs persons with knowledge of urban and rural slums to provide a basis for the modifications required to obtain acceptance of the program by those who need it most.

There exist also those parents who willfully neglect and even mistreat their children in cruel fashion. Infants are known to be left alone unattended repeatedly for 6 or 8 hour stretches while their mothers and fathers watch television. Battered children are also more common than one cares to believe. In behalf of these children, society has the obligation to intervene, for the impact on the children's development may be catastrophic.

--Channels must be made available for reporting the mistreatment and neglect of young children.

--Legislation must be passed to enable society to invoke corrective measures.

--Facilities for group care of foster care must be made available in a quality that will permit such children to develop despite rejection and mistreatment by their own parents.

Problem of Temporary Child-Care Services

Many children are neglected not willfully but because their mothers must work and facilities for temporary child care are scarce. Approximately 40% of American mothers work, and of those below the poverty line, something between 55% and 60% work. Reid (1966) has estimated that 4,000,000 children under six have mothers who are employed, yet day-care facilities exist for only a little over 200,000. Arrangements for temporary child care are also needed to permit parents to shop, to obtain some recreation, or, in health emergencies, to get medical examinations or to be away from home for hospitalization. When people lived in extended families in functioning neighborhoods, need for temporary child care posed no serious problems. Relatives and friends were available, willing, and competent to care for children. The situation has changed. Middle-class parents cope with the problem by employing baby sitters, but this is a problematic solution because qualified baby-sitters are in short supply. For the poor, no such solution exists. As a result, young children are "watched" by next-door neighbors, disinterested older siblings, or simply by no one at all. The results include many empty hours in which children are deprived of stimulating contact with others, high rates of accidents (the rate among Negroes three times that among whites), and illness.

Suggestions for action. Several corrective measures would appear to be desirable.

--One might be to utilize Head Start programs for day-care by extending their hours.

--Another would consist of providing day-care facilities for young children in neighborhoods where they are most needed. Such facilities should be organized with parent participation to give the parents an opportunity to learn new strategies of child care by example, perhaps in child-care clubs. Outside funds would be needed for space, equipment, and supervisory personnel. These facilities should be open not only during the day but also evenings and week-ends, when their services would be in considerable demand.

--Provide baby-sitting service with trained and responsible personnel at minimal cost for parents who must leave their children for various periods.

--Provide training sessions for all persons--children, adults, old people--in the neighborhoods of the poor. Emphasize in the training the active nature of the baby sitter's responsibility to conduct constructive and enjoyable activities with children, in the rudimentary skills of baby and child care, and in what to do in case of emergencies.

Suggestions for investigation.

--Surveys should be conducted to determine how children are presently cared for in various neighborhoods.

--Studies comparing the rates of development during the first three years under various regimes of child-care in the absence of parents.

Problem of the Forgotten Years: Two to Four

The great majority of American children are now born in hospitals and receive medical care from private physicians or in well-baby clinics through the first year or two of life. Thereafter, if they come from economically deprived families, they may never receive professional attention of any kind until they enter school or, for a small proportion, until they enroll in Head Start or nursery school at age 4. American has no real program of services for children between the ages of one and six available to all families. Such a program is desperately needed.

[illegible]

Suggestions for Action.

--The well-baby clinic provides one obvious basis for extending services to young children and their families. In order to make these services accessible to those who need them most, again it would be necessary to locate centers directly in deprived neighborhoods. This can probably be most quickly and economically accomplished through the use of trailer units staffed in part with neighborhood personnel.

--The establishment of new services will not be effective if imposed from above. The initiative of parents must be aroused and they should be involved in both the planning and operation of services. For this reason, the pattern employed in the Head Start program of making Federal funds contingent upon satisfactory proposals submitted by local agencies and groups would appear to be desirable. As with Head Start, however, the guidelines for the program should be developed in advance on a national level by a committee of experts.

Problem of Missing Fathers

A growing body of research points to the unfavorable effects of father absence on personality development, especially in boys. Father absence is, of course, more prevalent at lower economic levels and is most prevalent in Negro families. The male parent is missing in about 20% of all Negro households and in about half of the households of the very poor. Father absence has been shown to be associated in children, and especially in boys with low levels of aspiration and achievement, with the inability to defer immediate for later gratification, low self-esteem, poorer school performance, susceptibility to gang influence, and delinquency (See Bronfenbrenner, 1966).

It is significant in this connection that, despite all of its positive aspects, Project Head Start perpetuates for many children of poverty the problems created by an environment substantially devoid of adult males. All but a small fraction of Head Start personnel working with the children themselves are women. The absence of male discipline and male models thus represents a crucial omission in the lives of many children of poverty. To what extent this may also be true in other more prosperous segments of our society remains an open question.

Suggestions for Action.

--Recruit actively and train boys and men for work in Head Start and in other programs for children. One method for attracting men into work with children would be to offer special training stipends and scholarshops, with supplements for those already supporting families.

--Although some fathers have been used as volunteers in the Head Start programs, they have typically been assigned such menial responsibilities as janitorial work. These responsibilities do not bring them into direct contact with the children. An active effort should be made to engage adult and adolescent males in activities involving direct interaction with the children and especially the male children.

--Young children need to see men, and especially their fathers, as competent figures evoking respect. To fulfill this need a concerted effort should be made to identify special skills among fathers and have them exhibit their skills before children. In addition, men, both Negro and white, who possess unusual skills and have found a place in the neighborhood, should be encouraged to participate in neighborhood activities with children so that the children may be exposed to a variety of male models whom they can respect and emulate.

--A few Head Start programs have used junior volunteers. The experience reveals that adolescents and even pre-adolescents can work both responsibly and effectively with preschool children. Even adolescents known to be aggressive and possibly delinquent proved to be dependable and served as exemplary models for their charges. The active involvement of older children and adolescents in programs for young children promises not only to help the young children but to help the older children and adolescents as well. It may also help to interest young people in careers of work with young children.

--Welfare and AFDC legislation should be changed to make it advantageous financially rather than disadvantageous to have fathers living at home and contributing to income. The 28 States which have not yet altered the AFDC legislation should be urged to do so.

Suggestions for investigation:

--The full extent of father absence and its effects on children in American families is inaccurately known. Several factors in urbanization have decreased the opportunities of middle-class children to have contact with their fathers. The time spent at work away from home, in commuting, in evening meetings, and in week-end business trips all conspire to keep fathers away from their children. In view of the deleterious correlates of father absence, it would be highly desirable to investigate the effect of part-time father absence in American families.

Problem of Aggression and Violence

The assassination of President Kennedy, followed by a series of violent crimes culminating in the brutal murder of Valerie Percy, has alerted Americans to the problem of violence in our society. Violent crimes appear to be much more common in the United States than in European countries and violence appears to pervade every aspect of American life (See Wolfgang, 1966).

Although the causes of violence are manifold, various bits of evidence suggest that some of its roots are found in early childhood. For example, the work of Bandura in the United States, Walters in Canada, and others indicates that observation of episodes of violence in real life, in films, or on television can instigate similar behavior in children ranging in age from 3 to 25 years, even when the young themselves regard such behavior as morally wrong (See Walters, 1966). Moreover, as revealed in testimony before the Subcommittee to Investigate Juvenile Delinquency, chaired by Senator Dodd during the 87th Congress, the amount of such material being presented on TV is colossal, and neither the broadcasters nor their clients are disposed to do very much about it.

Suggestions for Action:

--Although further research is needed, sufficient evidence is available on the power of television to arouse violent impulses in children to warrant initiating serious discussions with representatives of the industry and their clients regarding their social responsibility in this regard as well as requesting the Federal Communications Commission and other relevant Federal agencies to undertake at least monitoring if not controlling functions in this matter.

Need for Training Child-Care Workers

The United States is woefully behind other modern nations in the training and making available non-professional personnel qualified to work with young children. In the countries of Western Europe, as well as the U.S.S.R., every city has its training institute for the preparation of people called "upbringers." Candidates enter with the equivalent of grade school or high school education, and receive special training consisting of courses in health, psychology, education, homemaking, and recreation as well as supervised experience with infants and children. Upon completion of the program, these "upbringers" are qualified for work in institutions, camps, community centers, playgrounds, or private homes.

Large cadres of non-professional personnel qualified to work with young children are desperately needed in contemporary American life. This need is not confined to the children of the poor, although it is there that it is most acute. A variety of factors have contributed to its development, among them the decline of the extended family, the large number of homes with an absent father, the growing proportion of working mothers, increased parental absence required by commuting to work, and the hazards of urban life for young children.

Finally, the creation of sub-professional jobs involving work with children provides an excellent vocational opportunity for high school or even grade school graduates. Most of these jobs do not require a high degree of professional skill: witness the salutory effect of the attention of mentally retarded women on the babies transferred from the orphanage in the study by Skeels and Dye (1939). Yet, with proper training and recognition such jobs can be challenging and rewarding; they can also contribute to the psychological and social development of those who hold them. In short, they present much-needed constructive vocational opportunities for persons from economically deprived backgrounds, and the training received would modify their own child-rearing.

Suggestions for Action:

--Programs for training sub-professionals of both sexes to work with children should be established, perhaps along the lines of programs now available for training practical nurses. Communities wishing to set up such programs could apply for Federal support by submitting a plan meeting general criteria developed by a committee of experts. Upon completion of the program, graduates would be furnished with a certificate qualifying them as child care workers.

--Positions for child care workers should be set up in Project Head Start and other Federal programs to set a pattern for creating analogous positions in state, municipal, and private agencies working with children.

--The general public should be encouraged to employ certified child care workers as baby sitters, camp counsellors, recreation workers, attendants in institutions, etc.

G. Summary

In summary, the argument runs as follows.

Our forefathers laid down the ethical principle that equality of opportunity is an inalienable right. Whether one becomes concerned about the opportunity provided by the circumstances in which the development of a child occurs during his infancy and early childhood depends upon one's opinion about the importances of the circumstances of early life for what comes later.

Opinion about the importance of circumstances in a child's development has varied over the years. The 19th century has been called the "century of the child" because faith in education as the way to better man's lot was especially strong. This faith was, however, a matter of opinion, and it gave way in the course of the debate over Darwin's theory of evolution and their effect upon the intelligence-testing movement. This faith gave way to beliefs in economic determinism and in predetermined development and fixed traits shortly after the turn of the century.

Evidence from recent advances in the biological and behavioral sciences, however, clearly deny these beliefs. No longer can there be serious doubt that the environmental circumstances of infancy and early childhood influence heavily the subsequent development of a child. Moreover, the longer any given kind of circumstances endure, the more difficult it becomes to alter the direction of their effects.

The circumstances of infancy and early childhood are important for later control of impulses for self concept, and for all human traits, but, somewhat contrary to recently prevailing opinion, they have also been found to be exceedingly important for the development of intellectual competence and motivation to achieve.

The circumstances of slum rearing clearly interfere with the development of health, both physical and mental, and with the development of intellectual competence and motivation to achieve. On these grounds, one must say that equality of opportunity is at best but an ideal.

Our epoch has brought new developments in the industrial revolution with the invention of automated machines and electronic computers. These new developments put a new emphasis on intellectual competence. The demand for those of low competence in the labor market has shrunk, while the demand for those of high competence has greatly expanded. These new developments in the industrial revolution have brought about a new spurt of urbanization.'' This urbanization has served to replace the extended family with the nuclear family, put parents in a world of strangers without dependable relatives or friends near by. It has also greatly diminished the variety of adults with whom children have regular contact. This not only makes it more difficult for them to encounter those circumstances through which they develop competence automatically, but it has made the peer group the main source of the values acquired, values often antithetical to those of the adult society and to those required for an organized society.

Our efforts to help the children of the poor have largely failed because such services as medical and child-welfare services are inadequate in quantity, because some of the programs of income maintenance demean self-esteem and discourage initiative, because too often we try to "do for" people instead of helping them to improve their strategies of child rearing and to organize services in their own behalf, because the existing efforts are fragmented locally and at all levels of Government, and because the needs of children have shamefully low priority. Our investigative efforts, unfortunately, are least in both quantity and quality in the domain of discovering how best to foster the development of health, intellectual competence, motivation to achieve, hope, self respect, and humanity.

The ethics of our forefathers call for use of the knowledge we have to help to develop programs that will help to equalize the opportunities of children of the poor to develop a greater share of their hereditary potential. At the same time, they demand that we increase our efforts to investigate the role of circumstances in early development and to innovate new ways to foster development for all children of the future.

III. ELABORATION OF RECOMMENDATIONS

A. Establish a Federal Office For Children

Governmental organization is typically designed for functions or processes. This Task Force lacks the expertise to suggest any change in the basic nature of governmental organization, nor do we believe that any such suggestion is warranted. Yet, as our analysis has indicated, the needs of children have such low priority that they endanger the future quality of American life. Children do not vote. Relatively few citizens grasp the long-run implications of allowing their needs to continue in low priority in competition with the other demands of government.

In view of these considerations, the needs of children call for special consideration in government. They call for government agencies:

--more concerned with the people than with such "functions" as health, education, welfare, etc.,

--more intent on getting appropriate things done for people than on proper "channels"

--more determined to use existing resources and institutions than to develop new bureaucracies.

We members of the Task Force believe that the needs of children call for special consideration and increased priority at all levels of Government--Federal, State, and community. Although we believe that the programs for children must be operated at the level of neighborhoods below the level of organized government, we also believe that only the Federal government commands the prestige, the expertise, the influence, and the financial power to effect a general increase in the level of priority given to children's needs. We believe children need an effective "ombudsman" at each level of government, especially one at the Federal level.

Ironically, the approach that we believe is called for was recognized quite correctly at the turn of the century. With the support of both President Roosevelt and President Taft, this recognition resulted in the establishment of the Children's Bureau in 1912. Yet, as this Report is being prepared, the newspapers are describing a proposal for re-organization within the Department of Health, Education, and Welfare which would abolish the Children's Bureau and fragment its all-too-limited functions among "Departments" of health, education, and welfare within the new structure. Such a step, in our judgment, would completely negate the advance in governmental organization of half a century ago. It would preclude any real possibility, at the Federal level, of coordinating the various efforts to meet children's needs and of giving them top priority. The Task Force strongly opposes this proposal as described in the newspapers. Instead, the Task Force recommends:

--that an Office of Children be established within the Department of Health, Education, and Welfare to be administered by an officer with rank equivalent to that of the chief officers for health, education, and welfare.

This Office of Children should be charged with responsibility to:

--administer those programs now lodged in the Children's Bureau, Head Start, and the new programs recommended in this Report.

--examine all existing and pending legislation affecting the needs of children with a view toward making changes that will increase its effectiveness in providing the circumstances that will foster maximally the development of children.

--serve as spokesman and coordinator for programs affecting children in such decision-making areas as budgeting, program planning, and legislative development.

--work with other Federal agencies--the Public Health Service, the Office of Economic Opportunity, the Department of Housing and Urban Development --to assure, in the administration of government programs, that proper priority is given to children's welfare and that Federal grants are used effectively to promote the growth and development of children.

The various new programs proposed by the Task Force depend heavily on utilizing funds under the direct supervision of Government agencies other than this proposed Office of Children. Obviously, "coordination" is fundamental. One promising administrative device would consist in establishing joint "project teams" composed of representatives of two or more Government agencies. Such a team, for instance, might with the counsel of professional people now engaged in the development of model programs, design the optimum content and the guidelines for the establishment of the Centers for Children and Parents that hopefully would include school programs for children of five and possibly six operated by the public school within the neighborhood, say in an apartment building. Such a team might also carry on negotiations with project applicants, and then make recommendations for joint agency funding to the Commissioner of Education (say, under the Grants for Supplementary Centers in the Elementary and Secondary Education Act of 1965) and to the Chief of the new Office of Children (for use of grants for Centers under the new authorities proposed in this Report).

The Executive of the new Office for Children should have a substantial staff of technical assistants to aid communities in initiating the programs recommended in this Report.

In addition, the Task Force recommends the

--appointment of a committee, charged with a continuing review of policy, to be selected for staggered terms of limited duration from outstanding experts on the various aspects of child development who are outside the Federal service and who include representatives of such fields as anthropology, education, medicine, psychiatry, psychology, and sociology, and of the general public.

--establishment of a committee to examine existing programs of Government support of research and development for weaknesses, to advise on the priorities in the use of Government funds for research and development in the domain of child development, to foster communication among the various review committees that pass upon applications for research funds, and to consider and advise on general strategy.

This latter Committee should be composed of:

(1) members of the staffs of the National Institute of Child Health and Human Development, the National Institute of Mental Health, the Office of Education, the proposed Office of Children, and the Office of Economic Opportunity, and

(2) from five to seven individuals from outside the Government Service who are both highly competent and highly familiar with various parts of the research related to child development.

Since communication in research must occur close to the operating level to be effective, and since communication at this level is especially difficult in Government programs, this committee should also consider arranging for regular communication among the executive officers, the chairmen, and representatives of the various committees that review applications for funds with which to conduct research.

B. Increase the Priority of Young Children's Needs In Community and State Governments

1. Community Commissions for Children

The programs of effort to foster early child-development must deal with children and their parents in neighborhoods. But Government does not exist at the neighborhood level. That level of Government closest to people is to be found in communities which contain many neighborhoods. Public concern for the development of young children is critical in each community. It is here that the grants are finally spent for programs. It is here that people are hired to provide the services required. It is in the community that effective coordination is most essential. Here the schools, the agencies of health, the agencies of welfare, of recreation, and of poverty have their contact with the public--a sharp contrast to the remoteness of both Washington and the State houses.

In order to increase the priority of the needs of young children and their parents at community level of Government, the Task Force recommends:

--Federal grants to establish and to support "Commissions for Children" in the various communities.

These grants can be expected to average about $35,000 each year for each Community Commission, less in smaller communities but larger in the bigger cities.

These Community Commissions would:

--serve as the coordinating, planning, and policy-setting agency for the various kinds of services to children and their parents in the communities,

--initiate and organize the Centers for Children and Parents in the neighborhoods and receive applications for the support of such Centers from various agencies, private or public, which can muster the necessary cooperation among existing agencies to provide comprehensive and continuing services,

--be the applicant for and recipient of, except in unusual circumstances to be described and documented in the application, Federal grants to support the coordinated programs for children and parents within their neighborhoods proposed in this Report,

--work out ways to secure needed resources for children that are not immediately available in the community,

--devise and experiment with new kinds of programs, and

--collaborate with such local institutions of higher education as community colleges and teachers colleges in the training of personnel needed in the care of children.

The Commissions would be quasi-public bodies composed of the following:

(1) those key public officials including the chief officers of the community, the schools, public health, recreation, welfare, and other departments related to child development;*

(2) representatives of people to be served, initially to be appointed but later to be elected by them, to participate in the planning and to keep plans realistic for their needs, and

(3) professional and lay persons concerned with and knowledgeable about early child development and the needs of children in general and in the various Centers for Children and Parents.

The number of these Community Commissions for Children can ultimately be expected to reach about 1,500. For the first year, the Task Force recommends that:

--Federal grants for Commissions for Children be awarded to approximately 200 communities, approximately 100 to communities with populations over 100,000 and approximately 100 to communities with populations less than 100,000.

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*It may also be highly desirable to include the chief of police. In projects supported by Ford grants in New Haven, Connecticut, and in Oakland, California, it has been the judgment of the program leaders that the cooperation of the police has been crucial.

The task Force has extended the definition of community to include counties or groups of counties and also regions that may, in some instances, cross state boundaries. We hoped that some of these might become sufficiently organized to apply for grants.

Each Community Commission for Children would have a director and a professional staff to assist in organizing Centers for Children and Parents within the neighborhoods and in planning for comprehensive, integrated, and continuous services for children and their parents, especially those in poverty.

The Commission would also have a permanent planning section responsible

--for keeping informed about Federal, State, and local -- private and public -- programs for children,

--for keeping abreast of knowledge of new techniques of fostering development in very young children,

--for collecting and integrating information about the community required for preventing damage to the development of children and for organizing effective programs to foster their development.

2. State mechanisms to raise the priority of children's needs

In order to encourage the States to increase the priority of their concern for the needs of children and to increase their efforts to foster early child development, the Task Force recommends:

--that Federal grants be made available to the States to assist them in establishing mechanisms to do at the State level what the Commissions are designed to do on the Community level.

These mechanisms would:

--provide a single place at a high level of authority in which to lodge the responsibility for children's needs,

--plan jointly with the State's agencies of education, health, and welfare and with the other agencies concerned with children's needs to maximize the benefit of Federal grants to children and their parents.

--plan the organization of comprehensive programs resembling those in the Centers for Children and Parents for sparcely settled rural areas.

In view of the wide-spread poverty and primitive cultural level in certain sparsely-settled rural areas of the United States, the Task Force also recommends:

--that the States be encouraged, with special Federal grants for the purpose, to develop programs resembling those for the Centers for Children and Parents for the children and parents of poverty-stricken rural areas, some comprising perhaps several counties, where it would be unfeasible for various local reasons to create Community Commissions for Children.

Relationships Among Neighborhood, Community, State, and Federal Authorities.

Ideally, and ultimately, the Task Force sees a direct line of administrative authority for the welfare of children going from parents to the local neighborhood facilities, from these facilities to the Centers for Children and Parents, from the Centers to the Community Commissions for Children, from the Community Commission to the State authorities, and from the States to the Federal Office for Children. On the other hand, just as we believe that Centers should not be delayed in some instances for the formation of Community Commissions, so we believe that Centers and Commissions should not be delayed until the States provide appropriate mechanisms for children. Thus, the Task Force recommends

--that appropriate authorities in the States should review all applications for Federal grants to Community Commissions and to Centers for Children and Parents, and that Federal authorities should consider seriously all comments made by State authorities before taking action.

On the other hand, at the outset, the States should not be allowed to veto applications for grants from Community Commissions and neighborhood Centers.

Moreover, the responsibility for determining the standards under which grants will be awarded should reside at the Federal level until the various States have demonstrated commitment to the needs of children and initiative in fostering the optimal development of infants and young children.

C. Neighborhood Programs

Infants and very young children are helpless. This obvious truism implies that their birthright to an opportunity to develop their hereditary potential must come through those who care for them.

Mankind has invented no system of fostering the development of infants and very young children that improves upon a stable pair of loving parents who understand what their children require for development. Despite current commentary to the effect that the dissolution of the family as a social institution may be imminent, the Task Force is convinced that a stable family, living in a cooperative and friendly neighborhood of families will always provide the best circumstances for infants and very young children to live and achieve their potential.

Although a good, intact family living in a neighborhood of cooperating, friendly families is the best facility for child rearing ever developed by man, we have seen that many of our urban neighborhoods are highly impersonal and that many families, both rural and urban, lack the wherewithal of income, of energy, of emotional maturity, and of understanding required to give their children that combination of circumstances, nicely matched to the child's stage of development, required to foster his full potential. For this reason, the major focus of the neighborhood programs proposed are directed at:

(1) strengthening and facilitating the family as a social institution, and especially in its child-rearing functions,

(2) supplementing or substituting for the family in those crucial child-rearing functions which families in poverty cannot adequately provide in their homes, and

(3) creating a basis for cooperation among families in the neighborhood conducive to satisfying family living and to provide the environmental circumstances required to foster the development of children.

To achieve these objectives the Task Force offers a new kind of institution and several additional programs. Specifically, the Task Force recommends:

(1) Federal grants to establish Centers for Children and Parents where parents would be involved in both the planning and operating of services in their own behalf, and where comprehensive health, welfare, and social services would be provided or made accessible.

(2) Increased availability of information and devices for family planning.

(3) Experimentation with such other approaches to the care of infants and very young children as:
   - income maintenance proposals, such as children's allowances, and paying mothers for "services as mothers" to get them to care for their own infant children instead of working, and
   - foster day-care arrangements for small groups of infants and very young children where the foster parents are carefully selected and adequately paid.

(4) Expand support of the research and development activities of the Department of HUD toward improving the cohesiveness of neighborhoods through construction and rehabilitation.

(5) Expand Head Start to maintain and increase the momentum which that program has established.

1. Centers for Children and Parents

The Centers for Children and Parents constitute a new kind of institution. They have a four-fold aim. They seek:

--to integrate the now fragmented existing services for children and families,

--to involve parents in the planning and operating of services in behalf of their children,

--to provide new programs for enhancing children's competence, and

--to assist parents, older children, and other members of the neighborhood in realizing their potential for constructive contribution to the lives of children, thereby enriching their own lives as well.

In concept, these Centers for Children and Parents constitute administrative units for service in local neighborhoods. The forms which these Centers take must inevitably vary in such differing settings as housing projects in large cities, neighborhoods of individual homes in smaller cities, and in sparsely settled rural settings like those of Appalachia. The Centers can be expected to vary in size. Many would serve perhaps 1,000 families.

They would:

--offer directly as many of the traditional health and welfare services as feasible through a single open door,

--offer by referral such other services as the community provides, and

--offer in satellite facilities such services as day-care, and a preschool program and locating them within the still smaller neighborhoods of the children served.

The Federal grants for Centers for Children and Parents would ordinarily be made to or through the Community Commissions for Children. This would be the normal and desirable pattern. In exceptional instances where local circumstances prevent the establishment of a Commission for Children, however, any private or public, non-profit agency might apply. In such instances, it is important that the applying agency be able to command the support of the local schools, the health services, and the agencies of public welfare. Yet, ability to command the support of the public schools, etc. need not, under highly special circumstances, be a necessary condition for a grant. In such special circumstances, the reasons for not establishing a Commission for Children for the community and/or not obtaining the cooperation of the schools and other public agencies must be described. In order to encourage initiative at the neighborhood level, moreover, any private or public, non-profit agency may take the initiative in applying to an existing Community Commission for Children for the support of a neighborhood Center for Children and Parents. Within five years, however, any Center must become incorporated as a separate quasi-public agency in its own right, free from ties with any other non-profit corporation.

In its organization, each Center would have a governing board such as would mirror the organization of the Community Commission for Children at the neighborhood level. This governing board should include the principals of the schools in the neighborhood, the neighborhood representatives of Government, representatives of the various volunteer agencies for health and welfare operated within the neighborhood, professional and lay persons interested and knowledgeable about children and their needs, and elected representatives of the neighborhood families. This governing board of the Center would have responsibility to:

- --prepare a constitution and by-laws,
- --establish policy for the operation of the Center,
- --employ the director (with the concurrence of the Community Commission),
- --help enlist the cooperation of parents within the neighborhood in the operation of the Center's programs.
- --maintain relationships with other organizations and agencies in the community,
- --hold elections, and
- --monitor the work of the Center's programs.

Each Center for Children and Parents would have a staff consisting of a director, appointed by the governing board and ordinarily with the approval of the Community Commission for Children, and as many professional and sub-professional members as would be required by the program. The chief operators of each of such facilities as those for day-care and for preschool would be members of the staff responsible to the director. The chief of each such facility would also have a staff of home visitors, of care-takers, and a committee of parents and members of the neighborhood for whom he would be responsible.

Services Directly Through the "Open Door"

These Centers for Children and Parents in the neighborhoods would integrate the now fragmented existing services for young children and parents by enlisting the cooperation of the various health, social, and welfare agencies within the community to offer directly through the open door of the Center:

- --income maintenance (to be offered in the space occupied by the Center by a representative of the local agency for public welfare),
- --comprehensive health care (to be offered by physicians and nurses from the local health agencies),
- --family planning (information and devices to be offered by either the public health nurses of the community or by representatives from the nearest chapter of Planned Parenthood),
- --educational entertainment,
- --family consultation service, and
- --family diagnosis and referral.

Many of the functions of the Centers would be basically educational in nature. The topics would include:

- --the importance of health and the nutritional status of women at the time of conception, and avoiding disorders of pregnancy,
- --information about family planning and its role in the health of children
- --the value of protein and vitamin supplements in preventing those disorders of pregnancy which damage the unborn fetus,
- --the importance of pre-natal maternal care,
- --techniques of infant care, including:
  - -the significance of perceptual stimulation in fostering infant development,
  - -the importance of responsive interaction for psychological development,
  - -approprfate diets for infants and young children.
- --techniques of early child-rearing,
- --techniques of home management,
- --techniques of accident prevention, etc.

It is often easier to get across information on such matters informally as part of entertainment, or in a morning coffee klatch, than in formal lectures or interviews. Much of the information can be incorporated in sound movies to be shown at the neighborhood Centers. In Topeka, Kansas, Dr. Lois Murphy has reported that mothers of the lowest socio-economic status dislike didactic lectures on child-rearing and home-making, but they welcome the same information in educational entertainment at coffee klatches.

Another approach to such educational efforts is by way of a specially trained home visitor. Professor Susan Gray has employed this technique with great success in her Early Training Project which has been underway for some five or six years in communities near Nashville, Tennessee. She reports that one of the most heartening findings of this project is the mothers' deep concern for a better future for their children than they themselves have experienced. Professor Gray sees these mothers as needing chiefly two things:

--sufficient resources of energy and time so that they can use the strategies they already have available, and

--the learning of new strategies.

These mothers need to learn ways of interacting with their children that will give the children more ability to order their own environment; that will build within them curiosity and the motivation to manipulate the environment purposefully. It is to teach such things that Professor Gray employs the specially-trained home-visitor. This visitor's task is to teach the mother quite specific approaches in her dealing with her two- and three-year old that will foster within him the development of confidence. The specifics include:

--how to read a story to a two year old,

--how to teach a child to recognize color names,

--how to teach a child to see similarities and differences,

--how to reinforce the child appropriately to bring out his motivation to achieve.

Inasmuch as Professor Gray's approach appears to be unique, thus far, in effecting improvement in the competence -- as measured by various standard tests -- not only of the children of parents involved in her program, but also in the children of a control group of children of parents within the same neighborhood who are not directly involved in the services. The fact that no such gains occur in the children of another controlled group, in a community quite removed, strongly suggests that the improvement in the local neighborhood controls has come about through face-to-face conversations between the mothers in the project and the mothers in the local control group.

Family Diagnosis and Services Through Referral

The director of the Center and his professional staff should serve in both diagnostic and referral roles. From what they know of the plight of the families, they would be able to determine those agencies within the community the services of which cannot be brought into the Center for a direct offering appropriate for dealing with the family's problems. These professional persons would then refer the family to the appropriate agency, or agencies, and also serve as a spokesman for the family -- where this is appropriate -- to be sure that the family got the referral services actually required. Typically, the referral services would fall into the following categories:

- medical care demanding facilities not to be included in Centers for Children and Parents for such services as:
    - obstetrical care of delivery,
    - hospitalization for any reason,
    - emergency care of injuries from accidents,
    - convalescent care,

-prosthetic devices, and

-emergency care for children whose mothers become ill or must leave home for urgent reasons, etc.

While it would be desirable to have comprehensive health care available in each Center, this would be unfeasible in some, or even in many initially. When it is unfeasible, the Center would serve as a referral agent also for such services as:

-pediatric care of infants and children,

-periodic medical examinations,

-immunizations,

-dental care, etc.

--access to diagnostic centers where parents can obtain for their children specialized educational, psychological and medical services,

--access to child guidance, day-care, and residential services for children who need special assistance because of mental retardation, emotional disturbance, or other conditions that place such a heavy burden on the family that the child cannot be properly cared for,

--long-term care for children without parents, through adequately financed and supervised foster care in homes or through appropriate institutional arrangements, with the Centers continuing to provide the needed supplementary services,

--assistance obtained or given directly to make it possible for the family to participate in religious, educational, cultural, recreational, or other activities chosen by the family for the purpose of enriching their lives, etc.

Group-Care Facilities for Infants and Children

Between 50 and 60 percent of the mothers in poor families work. It has been estimated that there are four million children in this country who need day-care, but facilities for such care exist for only approximately 200,000 young children. In view of such considerations, every Center for Parents and Children would be expected to have one, and possibly more, day-care facilities for children under two, or possibly two and one-half, and every Center would be expected to have a nursery-school facility of the Head Start type for children from two-and one-half or three to school age.

Such facilities are needed not only by mothers who must work, or even choose to work; they are also much needed on an occasional basis by non-working mothers to enable them to get out of their homes for shopping, for participation in community life, and for recreation. But the main purpose of these facilities is not merely to permit parents to get away from their children. On the contrary, the purposes are:

--to provide the children with the care that their parents cannot provide,

--to provide enrichments of experience that will foster the psychological development of the children, and

--to provide a place wherein parents can learn by observation and participation new and more effective ways of dealing with their children which are conducive to their development of intellectual competence and motivation to achieve.

The professional staff of the Centers allocated to these group-care facilities in the even smaller neighborhood settings would involve the parents in the operation of the programs. They would involve not only the parents of the children served, but also other local adults and, especially, adolescents from the age of 12 upward. The Centers might well pay for the help of some of the women within the neighborhood who are adept in learning appropriate ways of dealing with children. Mothers whose children are grown constitute an especially important resource in this respect. Those to be involved in the program from the neighborhood group should include not only females, but also men with skills and hobbies relative to the interests of young children. In this connection, retired workers with special competencies may be used to excellent advantage. Experience indicates that teen-age boys, even those with delinquent records, can be highly responsible and effective in working with young children. These facilities supply the possibility for such work, and in doing so they represent one of the major opportunities to be provided by the Children's Activity Program (see Section III-C, pp. 113-115). With appropriate training, often very little, older children of both sexes could serve not only as "teacher's aids" but also as play supervisors, baby-sitters, as escorts for young children on trips or outings, and as aides at the "open door."

The programs of the group-care facilities should not be confined to these facilities themselves. Parents who use these facilities are rendered especially accessible to home-visitors who have been trained in the fashion that Professor Gray has trained her home-visitors. Professionally-trained home-visitors, moreover, could well involve young adults and adolesents in these visits. These young adults and adolescents could well be trained to play with the children after the fashion that the mothers are being trained to play with them in the group-care facilities. Thus, the home-visitor could carry out with the child and his parents some of the activities which are normally conducted only at the Center itself, and thereby serve both to teach these young adults and adolescents the techniques of child care, but also establish the home as an appropriate context for such experiences. In addition, the home-visitors and the young adult and adolescent visitors could discuss nutrition, child care, household management, and whatever related topics might be of interest and help to the mother concerned.

Home visits would be especially important for families without children enrolled in the group-care facilities. They might even serve as a way to make such enrollment possible. Such home visits would provide access to mothers who are particularly inept with their children, and the eventual enrollment in the group-care facilities could serve as a supplement, enrichment, or even corrective for the experience of the home.

The programs of the group-care facilities --day care and preschool-- should, of course, be available to children living in foster homes or institutional centers within the neighborhood.

Collaboration between the Centers and the Schools. These group-care facilities should maintain close relationships with the school which its "graduates" will ultimately be attending. One likely vehicle for achieving continuity is through joint appointments of some staff, and the sharing of volunteers between the group-care facilities of the Centers and the schools.

Collaboration between the Centers and the schools is highly important for other reasons and in other ways. The Task Force has hoped that schools might explore the possibility of establishing enriched educational programs for five-year-olds, and even first grades within these group-care facilities of the Centers for Parents and Children.

Children's Activity Programs

The children's programs of the Centers would not be limited to those of below school age. It is in peer-group associations outside school hours that many children imbibe values that are antithetical to organized society. One of the main programs of the Centers would provide organized activities for children of school age during the time when school is out. Here, again, close collaboration between the Centers and the schools is highly desirable.

These programs of children's activities would have a recreational character. But the aim of the program would be to provide experiences that foster intellectual development, confidence in the future, motivation to achieve, and would also foster the moral values required for participation in the main stream of organized society. The meetings would be to expose these school-age children to adults with special competencies and skills, who come from their own community, and who, as volunteers or paid workers, could serve as leaders, models, companions, and instigators in a variety of activities, including:

--supplementing work in school by conducting visits to museums, historical places, local industries, leading nature hikes, etc.,

--providing special help for pupils experiencing difficulties in particular school subjects,

--introducing children to instructive hobbies,

--acquainting children with the nature of their own community, its cultural composition, industries, government, economic resources, problems, and needs,

--introducing children to the range of occupations and skills to be found among men and women in the community among their own, as well as from other racial, ethnic, and socio-economic groups, and

--engaging children in service in behalf of their neighborhood and community through participation in the care of younger children, in the assisting of older people, and in carrying out improvement projects.

Many of these activities should permit joint participation of children with their parents. One major aim of these programs of activities is to enable the child to experience the reward of companionship with his parents, and with other grown-ups, in activities meaningful to both. In such situations, older children acquire not only competence but also confidence to meet challenges for achievement and responsible action.

The participants in the various programs of children's activities -- both children and grown-ups -- should be as heterogeneous as possible with respect to age, race, and socio-economic background. The Centers should draw upon high school students, college students, and adults from other neighborhoods on a volunteer basis to achieve this objective.

Training

The tremendous need for properly trained personnel for any expansion of the programs of neighborhood Centers demands that wherever these Centers are located in communities with community colleges, teachers' colleges or liberal arts colleges they should serve a training function as well as a service function. In the training function, the programs in the group-care facilities of the Centers would provide the source of supervised experience. The supervision could be provided by the professional staff of the Center, with consultation from representatives of the college with which the Center is associated.

Funding

Several existing sources of Federal funds might well be utilized to help finance the activities of the Centers for Children and Parents. These include:

--HUD Neighborhood Facilities Program which authorizes grants to public bodies for 2/3 the cost of either new construction or rehabilitation of facilities when two or more services, such as health, recreation, or social services are to be continued.

--Public Health Service amendments of 1966 provide funds for grants to States for comprehensive health services, the bulk of which goes to communities. In addition, project grants are awarded for special health activities.

--Title XIX grants to assist States in providing medical assistance in behalf of families with dependent children. This encompasses also everyone under-aged, blind, disabled, parents of dependent children and any "needy" child.

--Section 532, Title V, of the Social Security Act (1965 amendment) is a broad-purpose program of project grants to meet up to 75% of the costs of services to improve the health care of preschool or school-age children. The objective is to provide the range of services needed by children living in the designated low-income areas. The projects must be coordinated with related local health, education, welfare, and OEO programs.

--Section 531, Title V, of the Social Security Act supports maternal and infant care services. Grants are made on a project basis through Public Health Departments.

--Federal funds, available through the Office of Education, for grants to local school systems to develop and to implement programs designed to "meet the special educational needs of 'educationally deprived' children" in school districts having high concentrations of children from families with low incomes.

--Federal funds, available through the Office of Education, to provide grants to local school systems with which to develop innovative collaboration with such institutions as museums, zoos, parochial schools, and universities for supplementary educational facilities and services.

--Federal funds available through the Office of Education, the Children's Bureau, the Office of Economic Opportunity, and the National Institutes of Health for grants to support research and development relevant to early child development.

--Federal funds to provide grants to communities to enable them to launch programs of community action to combat poverty, and

--Appropriations for Head Start to provide, through the Office of Economic Opportunity, preschool programs of high quality for young children in impoverished families and also comprehensive health care and welfare for both the children and their parents.

The Task Force recommends:

--that all these existing sources of Federal funds be increased, and

--That the administrator of the new Office for Children be charged with responsibility to assure that the needs of young children be given top priority in the use of these existing sources of funds.

The Task Force considered the share of funds that should come from the Federal sources to support the Centers for Children and Parents. In the poorest of neighborhoods, where the vast majority of families have incomes of under $3,000 a year, the Federal contribution should probably be as much as 90 percent of the total cost of the operation. In neighborhoods of moderately high income, the Federal share might be only 10 percent of the cost, and in the neighborhoods where the income level is generally above $15,000 a year the Federal Government would share none of the cost. Such a graded arrangement for the Federal contribution would place the highest priority for the establishment of Centers for Children and Parents where the most critical problem resides. At the same time, it will permit communities to use their own funds to extend the benefits of the Centers to a wider segment of the population. The Task Force believes this is desirable because it would encourage economic and racial integration. In this respect it might be wise to permit communities to levy fees for the use of the services for the Centers as a means of obtaining its matching share. One way to do this would be to post a fee schedule showing the charges for these services at various income levels above the poverty line. On the other hand, the Task Force is opposed to any elaborate and strictly-enforced fee-pay system in which the time of professional persons would be wasted on investigations of eligibility.

2. Increased Availability of Information and Devices for Family Planning.

While family planning is widely practiced in the United States, it is least often employed by families in those segments of the population which need it most. The experience of such private organizations as Planned Parenthood in economically deprived areas indicates the problem is not so much one of resistance or inability to utilize the techniques. The problem is two-fold: lack of information and lack of availability. People who need and would use Family-Planning techniques fail to do so because they do not know about them or because they feel that they cannot afford them. As a result, hundreds of thousands of children, perhaps millions of children, are born unwanted. Not only do many of them thereby receive inadequate care for themselves, but they also reduce resources available to older brothers and sisters. The Task Force recommends:

--that hospitals provide free information as to the nature and availability of Family Planning techniques to mothers at the time children are born. (Objections of religious groups can usually be satisfied by including information on the rhythm method.)

--provision of free information to all couples at the time they apply for a marriage license,

--that schools should include information about family-planning as part of a general program directed toward preparing young people of both sexes for responsible and rewarding parenthood, and

--that information on family-planning definitely be included among the activities of the Centers for Children and Parents.

3. Federal Grants for Experimentation With Other Kinds of Child Care.

Due to the manner in which aid to families with dependent children operates (already described), millions of mothers in American society really have no choice as to whether they will stay at home and care for their children or go to work. Yet, mothers, when adequate, constitute the best and most available source of manpower for the care and education of infants and young children. Even when they lack the knowledge and skills for proper child care, their almost-universal ready-made love of their children makes them ready pupils for tutelage when other needs are satisfied. Moreover, when the cost of adequate full-time, professional group-care of infants is examined, it turns out to be on the order of $4,500 a year for each infant. In view of these considerations, it may be a matter of wise public policy for mothers to be encouraged financially to remain at home and care for their own infants and young children, getting special tutelage where this is required. But if this is to be done, it should be done in a fashion which is designed to strengthen families and to foster hope and initiative in parents. In view of such considerations, the Task Force recommends:

--that Federal funds be made available, through the Office for Children, to support experimentation with such proposals for income maintenance as children's allowances, and paying mothers for "services as mothers."

--that Federal funds be made available for grants to support experimentation with foster day-care for small groups of infants and very young children where the foster parents are carefully selected, adequately paid, and supervised.

4. Development of Neighborhood Cohesiveness Through Construction and Rehabilitation

This Task Force is concerned not only with today's children, but with those of the future as well.

For those already born, the most we can do is seek to serve them and to rehabilitate where they are as best we can. For the children living in slums, be they metropolitan, rural or sterile-suburban, our best is often limited by an ugly stifling physical environment. In many ways the large Federal Housing Projects of the 1940s and 1950s helped to destroy what there was of genuine "neighborhood," even in the slums. They took away the shops. These were places where people worked and could be observed at their work by the children in the neighborhood. In the meantime, the parents lost their "clubs," and the children lost both a variety of adult models and the interest of adults near at hand in their own behavior and development.

For the children yet to come, this physical environment can be much improved. It is the obligation of this generation to encourage that improvement as rapidly as possible. In view of these considerations, the Task Force recommends:

--that additional research funds be made available to the Department of Housing and Urban Development for research and development designed to determine how best to foster neighborhood cohesiveness through construction and renovation,

--that the Secretary of the Department of Housing and Urban Development give a high priority to research that will make the environments of neighborhoods more favorable to family life and to the development and safety of young children,

--that the new Officer for Children in the Department of Health, Education and Welfare, work out the specific details of what features in the neighborhood should be favorable to family life and advise the Department of Housing and Urban Development on how these research funds might best be used, and

--that plans for Federally supported housing projects for families always include provision for the needs and activities of children and for the various services required by neighborhoods of families.

5. Expansion of Head Start

To millions of Americans, Project Head Start has constituted the most notable achievement of the anti-poverty program. Enthusiasm for the program, willingness to work with it, and confidence in its success, have created a great demand for more Head Start programs. This year some 500,000 children will benefit from summer Head Start programs and some 200,000 from full-year programs. There are now approximately 3,000,000 children aged from 3 to 5 years in families with incomes below the poverty line of $3,000 a year. Of these, approximately 500,000 are presently enrolled in publicly supported kindergartens, the majority of which provide educational service of considerable lower quality than does Head Start. Although many Head Start programs could probably be improved by sharper focus on those particular skills that the children of the poor have failed to learn, the program is the best remedy now available. At this time, applications from communities ready to move forward would provide for an additional 200,000 Head Start pupils. The Task Force recommends:

--expansion of Federal support for Head Start to permit making grants to those communities ready to move so that the 200,000 additional children in them may enter Head Start classes in the fall of 1967.

D. AFTER HEAD START, KEEP MOVING

That children of the poor are less successful in coping with school than their middle-class peers is a very old story. That they are less successful because they have lacked environment-based opportunities taken for granted in middle-class homes to acquire the intellectual capacity and the motivation to achieve required for coping with school is a new view which has become current only since World War II. This new view is based largely on the new evidence that the environmental circumstances of infancy and very early childhood are highly important for the development of intellectual competence and motivation to achieve.

Project Head Start represents a valiant attempt to remedy within a summer, or fourth and/or fifth year, before children start to school, the effects of their lack of opportunities to learn during the previous three or four years of their lives. Inasmuch as approximately half of the test-measured intelligence present at age 17 is achieved during the child's first four years (Bloom, 1964, p. 88), the Head-Start effort is all "too little and too late" to constitute an adequate remedy. Nevertheless, Head Start has been a move in the right direction. One of its major values has been to focus the attention of many people on the disadvantages children of the poor face in their development and to give Americans the hope and some degree of conviction that "the poor are always with us" can become an anachronistic shibboleth. While there must always be people below the average in every measure, this statement about the inevitability of the poor can become an anachronism so far as employability and participation in the mainstream of American society is concerned.

Thousands of children have now finished Head Start programs. The reports of gains in test-performance during these programs indicate that the programs have had considerable success. Yet, reports are also appearing to indicate that these initial benefits may fade as Head-Start children proceed through school. Many of these studies, upon which the headlines of the newspapers are based, have used improper methods. Perhaps the most common of these improper methods is to compare the performances of "graduates" of Head Start with those of children from more privileged backgrounds. These performances should be compared with those of children from similar backgrounds who did not experience Head Start. Moreover, from the standpoint of the etiquette of scientific investigation, the authors of those studies now being headlined have behaved improperly by giving their results to reporters before they have been submitted to the scrutiny of their scientific colleagues for criticism.

Consistent persistence of the gains obtained from a program involving "so little so late," however, can hardly be expected without a continuation of the kind of development-fostering circumstances that the Head-Start program provides. While children begin to gain trust and to develop curiosity and competence in a setting where a teacher has but 15 little pupils and where all the pupils and commonly their parents are involved in the excitement of learning, it is too much to expect them to continue this development when they are thrust in the schools of the slums or the slum-ghettos. There, in first grade, one harrassed teacher for from 30 to 50 young pupils is typical, and keeping order among them is the "order of the day." There the "graduate" of Head Start becomes a minority member of a larger group to whom the value of learning is largely unknown. If he is to be accepted in the now larger peer group, the recent Head Starter is inevitably set to relinquish any of the tender new attitudes, interests, and values that he has recently acquired which may make him different. The recent Head Starter in the setting of the slum school is not unlike the children of foreign-born parents entering an American school without English or with an accent. American parents who, after learning another language in experience abroad, attempt to rear their children bilingually, are highly familiar with this motivational phenomenon upon entering school where English is the lone tongue, their children quickly become antagonistic to the extra tongue and resent their parents addressing them in it before their new peers.

The recent Head Starter who enters a school where he must match his new-found skills and attitudes against children from middle-class backgrounds has another kind of problem. His new-found skills may not be enough. Whether we like it or not, school is a competitive situation. Those who see others performing at school tasks well beyond their own capabilities may sometimes be spurred to extra effort, but if the extra effort fails and fails, they come to see themselves as stupid. All too often they give up, and then settle for less than they might have become. Ordinarily, this latter kind of hazard is much less dangerous than the former of being thrust into one of the inferior schools of the slums.

What is needed is a continuation of the splendid effort of Head Start. What is also needed is a program of "follow-through" which will help to keep disadvantaged children moving in the directions started by their experience in Head Start. A program of academic activities combined with something like the Children's Activity Program (p. 113ff) proposed for the Centers for Children and Parents can be expected to avoid the fading of the gains from Head Start and to provide circumstances that will foster, instead, increasing gains. Children should have the opportunity both to begin well and to continue well. When remedial efforts such as Head Start are instituted, they must be continued to obtain their full value.

The following pages describe some of the activities that the Task Force believes should be going on in the schools as "follow-through" for Head Start to keep disadvantaged children moving in the development of their potential.

Comprehensive Services

The comprehensive services important for children's development are provided by the professions of medicine, child-clinical psychology, social work, nutrition, and by services involving the strengthening of parents. To deliver these services, the schools should become cooperatively linked with such community agencies as the departments of health, recreation, social welfare, and the other agencies providing services to children and their families. Successful Head-Start programs have shown that local, State and Federal agencies can pool their resources to deliver comprehensive services. They have also demonstrated that the school is often a natural center for diagnosing and delivering a variety of services that formerly were delivered in various places. As new schools are being conceived and sketched on drawing boards, an increasing effort is being made to provide space for comprehensive services. This effort results in large part from the experiences of schools with Head Start.

It is generally agreed, moreover, that the best examples of follow-through beyond Head Start are those where these services are both maintained and strengthened as children progress in school. The comprehensive services include:

--medical services, these should consist of a full medical evaluation, including teeth, vision, hearing, speech, tuberculin testing, laboratory analysis of blood and urine, completion of immunizations, and arrangement for follow-up services and corrective treatment, along with daily observations by the nurse and staff.

--psychological services, with a qualified school psychologist, should include educational diagnostic services so that remedial action can be guided by knowledge of specific deficits, observation, and play therapy if necessary for specific children. The psychologist should also be available to consult with teachers and parents regarding a child's behavior, learning style, and the approaches that might be used at home and in school to help the child.

--social services should be continued with a qualified social worker or home visitor available for frequent home visiting and consultation with parents on child and family problems.

--nutrition services should include a well balanced hot lunch, mid-morning and mid-afternoon snacks, and breakfast, if necessary. This has been especially difficult to provide in many elementary schools. There is no doubt that nutrition influences both a child's behavior and receptivity to learning.

--parent involvement has always been regarded as an essential component of a good school program, but all too seldom is it a characteristic of public school programs. But in the numerous cooperative nursery schools operated by middle class parents, the parents insist on participation.

> The parent in poverty should have an opportunity for real involvement in the schools. For the school, parents should be indispensable partners in achieving education goals. Parents are the most natural people to reach other parents. Their involvement in the school operation, its program, its practices, is the best way to improve the process of education within the school and the quality of the school-community.

Continuity of Effort

The provisions of comprehensive services as part of Head Start necessitated a cooperative involvement between the schools and other agencies as well as between the school and the home. The specific criteria concerned in the operation of Head Start classrooms promise to usher in an education revolution. These criteria are:

--small classes

--staffing patterns

--grouping patterns

--a more open curriculum

Small Classes. The well-to-do have long insisted on schools with small class groups, recognizing that the key to individual development is individual attention. Such attention is recognized as the best way to build a child's confidence in himself and help him to develop his academic skills. Due in part to the large classes so prevalent in poor neighborhoods, the bulk of the funds expended under Title I of the Elementary and Secondary Education Act have been to repair damage of poor learning.

The key to individual development is individual attention. A school child in a class of forty children cannot be treated as an individual and he cannot receive individual attention from the overburdened teacher. It is the rare child who can thrive in such a class. Every effort must be made to decrease the size of classes in the early years of school. An overcrowded classroom is a disgrace in a nation that prides itself in its children.

A highly essential form of individualized attention required by children in school is follow-through in diagnosing and treating special problems affecting capacity to learn, self-esteem, and social acceptability. In the early school years, even minor and readily correctible handicaps in vision, hearing, or speech can become the basis for eventual failure or drop-out. Similarly, conspicuous but readily remediable physical defects can serve as a focus for social rejection and self-hatred sufficient to cripple a child for life. Finally, in addition to problems having a physical basis, there are many psychological or social difficulties which, if recognized early, can be dealt with effectively but, if allowed to go unattended, become virtually irreversible in their destructive effect. Accordingly, the school must work collaboratively with the Centers in insuring that each child obtain needed medical or other special services.

While quality school districts take pride because their classes are in the low twenties, the class size of 15 established as a criteria for Head Start programs is close to the class size provided in the finest private schools, and recognized by teachers as optimal.

Staffing Patterns. We urge a much more flexible and differentiated use of personnel in the classroom. Teachers today are among the most overworked of our professions. This might be forgivable were the result better education for children, but it is not. Much of the teacher's "extra" time is taken up in clerical work, monitoring, and many other routine activities which require little of her special training and often even detract from effectiveness in her primary role as a source of support and stimulation to her pupils.

While we have long talked of more flexible staffing patterns, such a pattern was impressively demonstrated in Head Start classrooms which included a teacher, an assistant teacher, and an aide.

Such a classroom team working closely with consultants from outside agencies and services inside the school, changes the classroom from an island to a living-learning oasis. The master teacher is a planner and supervisor but spends most of his time working with children; he is free to function as a trained professional and to provide special attention to children who need it. The assistant teacher may be completing a professional internship under exemplary conditions. The aide, chosen from the school district on the basis of personality, natural ability, and aspiration as a member of the teaching team and a member of the community.

Moving the master teacher and the aide from the pre-school into the public school classroom is an essential follow-through operation. The children can progress without gaps or losses, and the parents can feel assured that their children are moving into the elementary school with teachers who already know them. The teacher and the aide, meanwhile, become members of the elementary school staff with a new assistant teacher, while the pre-school intern is now a full-fledged teacher, assisted by others. This staffing pattern links the Children's Center, other community agencies, the nearby academic institutions, and the community to the public elementary school, through a chain of teacher-assistant-intern-aide-parents, engaged in a program of comprehensive education.

Such a unified effort on the behalf of young children makes early childhood educational a national effort to establish school success early for the Nation's most vulnerable children. This teaching role should carry great professional prestige, and consequently provide an incentive to attract men to early childhood education. The precedent of men working with young children has been set by the pediatrician, pedodontist, recreation leader, camp counselor, and other men working with small children. To the disadvantaged child, day-by-day contact with men in school situations could provide a powerful positive influence.

Grouping Patterns. Every reasonable effort should be made to "ungrade" some classes in the early years of school so that children do not go through such sharp changes in learning atmospheres during their opening years of school. A teaching team might remain with a given group of children from kindergarten through the third grade or the eight year of life. To the child already disadvantaged by unstable home conditions, a new teacher and a new grade each year can be enough to stifle any desire to go on with learning at school. The ungraded classroom also permits individualized treatment of pupils in accordance with their level of development rather than grade placement. Finally, the ungraded classroom allows a more differentiated use of teacher personnel, with the master teacher serving as planner, demonstrator, and resource person for less experienced staff members working under her general guidance. It is essential, in this connection, that the master teacher not become merely an administrator who plans, observes, and supervises. A good deal of her time must be spent in contact with the children, in the classroom and out. Only in this way can she remain in touch with the actual needs of children and their teachers and serve as a stimulating model for both.

Mastery of a body of knowledge and skill is a continuous process. One skill permits access to another more powerful one; one form of knowledge permits going on to still deeper understanding of further related knowledge. In considering how to make the pre-school years a proper preparation for later years, we must perforce urge all possible effort to insure a continuous educational experience--from earliest childhood through the school years. The issue is not one of intellectual training alone. The continuity must be psychological, social and moral. School is an intensely personal experience for the child; in it he learns a view toward adults, toward the society, toward his age-mates and toward himself. When the child is well known to those responsible for his life at school, this knowledge and rapport permits them to find the most effective materials, teaching techniques, books and experiences compatible to his unique learning style, ability level, and the very idiosyncracies which may contain the core of his individual potentialities.

A More Open Curriculum. One of the important contributions of university-related research centers should be the preparation of new curricula for the years of early childhood education. The past decade has amply demonstrated that teams of university specialists in subject matter and in problems of childhood learning can, when coupled with inspired school administrators and gifted teachers, artists, writers, and film makers produce a curriculum that not only excites the interest of children, but develops their skills in thinking and problem-solving as well as their zest for knowledge with the development of a high level of competence as a result. In many places

American high schools are turning out students more interested, better informed, and intellectually more advanced than ever before in our history. Many new products for the less-well-prepared entrant into high school have also shown promise of being able to compensate for poor early preparation, though the longer the period of poor preparation, the harder the task of repair (See II-B, p. 28). We believe that the same kind of effort for the early years, emphasizing the continuity from the third year to the tenth, would prove highly productive. A current example of such elementary school-university cooperation is present in a partnership between the Sausalito Elementary School District in California and San Francisco State College, which involves college faculty and students, public school teachers and pupils, and citizens of the community.

Another example is the project called "Clinic for Children." This is a school-university partnership between New York University and a city school. The faculty from the university works with the school's professional staff and conducts professional courses for student teachers right at the school. Thus, the campus has moved to the school.

While basic research in laboratory settings is essential, the school is a natural laboratory for new curricular enterprises and should be involved as a willing and able partner. In this way, both kinds of institutions will lose their isolation, share their successes, work together to solve plaguing curricular problems, and bridge the gaps so long apparent between them. Such a joint effort would indeed facilitate great curricular leaps and remove materials and practices from schools that have so long proved painful and worthless to children.

A Variety of Approaches to Collaboration Between Schools and Centers

When the focus is on educating young children, and there is a parallel emphasis on comprehensive services, coupled with a new system of staffing, individualized and non-graded curricula, and a deep involvement between home and school, an educational revolution is indeed in process. The monolithic nature of the school gets demolished. The school, instead, becomes a natural community center with a focus on the rearing and education of children and the enhancing agent of all adults who live within its environs.

Basically, it is the quality of families that make a community, and the quality of communities that make a nation. In our belief in the family as the primary unit where very young children are reared and educated, we must recognize that only an enlightened generation of parents can rear an outstanding generation of children. Such an outstanding generation cannot be achieved by prescription and platitude. An outstanding generation requires careful education and experience at every phase of life.

To implement many of the foregoing recommendations, the Task Force urges active collaboration between the schools and the Centers for Children and Parents. The Centers should provide services for supplementing as needed the work of schools. These supplementary activities would include special tutoring for children having difficulty with school subjects, visiting programs to museums and other places, as already described in the discription of the program of the Centers (Page 113). Facilities must be made available for such work and special staff given training for conducting it effectively. Many of these same activities of the Centers could be carried out by appropriately trained adults or teenagers with only a high school, or sometimes even merely a grade school, education, who knows how to and enjoys working with children.

Thus, contacts with children might be provided along with instruction in the elementary, junior high, high school, and Community College. Experience indicates that senior and junior high school students, including those who may be doing very poorly in school themselves, can give very effective assistance in teaching reading, arithmetic and other beginning school subjects in the elementary grades. One reason for this effectiveness appears to be their relatively greater accessibility and appeal as models in comparison with adults. At the same time, the experience aids the learning of the older child as well. Not only does it teach him responsibility, but the research evidence suggests that it increases his own intellectual competence.

Young people should be trained for employment in work with children through a variety of special arrangements between the schools and the Centers for Children and Parents. The schools would provide a background of communicated information about development and child behavior while the Centers would provide experiences of work in the group-care facilities and as family visitors who play with children in their homes. Exciting careers should be developed wherein young people can consider their life goals in terms of work with children.

Young people can also be helped in their preparation for marriage and parenthood in the schools. Hardly a single area of subject matter in the schools--elementary, junior high, high school, and college--exists which cannot provide the basis of a unit of study related to the development of young children. Such units, coupled with meaningful participation in the operation of the group-care programs, in home visiting, in work with younger children on the playgrounds and on trips to museums, zoos, etc. provide glimpses of activities that will become part of later parenthood. It would be wise for all young people to have access to such experiences regardless of their social class.

Improving the Quality of Early Education

About 50% of the development of that intelligence which can be measured at age 17 takes place between conception and age 4, and about 30% more takes place between ages 4 and 8 (Bloom, 1964, p. 88). Given this as at least a roughly correct estimate, it is ironic that so little attention has been given to the development of appropriate curricular materials to foster the development of children in the kindergarten and first three primary grades.

We do not know how to create an optimal educational environment for the young child in our schools. All that we do know is that we have not even begun to exploit the possibilities of the environment for enabling the young child to learn. In addition, we have a successful pattern that we can emulate. The experience in the past decade has shown that great strides can be made in curriculum development by bringing together the most talented scholars, teachers, artists, and writers for the explicit purpose of improving the curricular materials. The American high school has been the first to benefit from this new work. We strongly recommend that a corresponding effort be made to design better curricular materials for the early years. We must make available the funds, facilities, and talent necessary to do this job so that we can be assured that we are giving our children the best that the human mind and spirit can offer. Provision must be made in the legislation on early child development for the funding of an effort to bring together our most distinguished specialists on childhood, our great writers and scientists, our finest artists and our most creative teachers. To develop a new curriculum for the child's first years of school experience, the Task Force urges, moreover, that special subsidies be made available for the production of films, books, music, to foster the development of children and to help their parents learn about family planning, about the importance of nutrition during pregnancy, and about the strategies of discipline and child care.

But curriculum alone will not be enough. We must make it possible and attractive for the most talented teachers to enter the elementary grades. Teacher pay scales must reflect the value we place on work with young children. In many places, they do not. We must also provide more and better professional training for teachers in the pre-school and early school years--and make subsidies available for them to receive such training. The need for subsidies is particularly acute in the case of men, who must be prepared to support families.

The Task Force has two explicit recommendations for Federal action:

(1) If any additional funds are appropriated for education of the disadvantaged under the Elementary and Secondary Education Act, such funds should be earmarked specifically for follow through of special enriched programs for Head Start children into the early elementary grades. Such funds should be paid only if standards are maintained on staffing, requirements for use of volunteers and aides, involvement of parents, "ungrading" of classes, more innovative and individualized curricular materials, and arrangements for exchange of teachers and other personnel between pre-school and school programs.

(2) Research funds available through the Office of Education should be used to support development of course materials on child rearing and family living for the elementary and secondary schools, and for the educational recreation programs for parents in the Centers for Children and Parents.

E. Federal Matching of State Funds for Child-Welfare Services

Legislation has long existed to provide Federal matching of State funds for aid to the aged, the blind, the financially dependent, the sick, and disabled on an open-ended basis, but not for services to dependent children. Thus, where the Federal government supplies from 50% to 83% of the total cost of the aid to the aged, etc., it supplies but an average of about 10% of the cost of child-welfare services through Federal grants for public-welfare services under Title V, Part 3 of the Social Security Act. These latter grants have had the purpose of stimulating further effort and support for welfare services for dependent children by the States rather than the purpose of sharing a substantial part of the total cost of such services with the States. In consequence, child-welfare services are in the woefully short supply and are of the damagingly poor quality already described (See II-E, p.64ff). In a very real sense, as matters now stand, the Federal government contributes to poverty and perpetuates it with this policy of low level support for child-welfare services.

In view of this Federal neglect of children, the Task Force recommends:

--that the Federal Government pay part of the total cost of public child-welfare services in each State through grants-in-aid on a variable matching basis, with provision for an open-ended appropriation, and with continued encouragement to the States for establishing, extending, and improving services for dependent children.

--that the statutory provision for an open-ended appropriation be formulated in such a way as to assure that there will be no decrease of expenditures of either State or local money for child-welfare services.

The purpose of such sharing of State funds for services to children is to provide for both an extension and an improvement of the full range of such child-welfare services as day-care (including that to be provided through the Centers for Children and Parents being recommended in this Report) foster care, institutional care, and services to protect those children who are abused and/or neglected. The following items illustrate aspects of the welfare services for dependent children which the new Federal funds could support.

--Greatly increased support for medical care for children, and especially for children under six years of age.

--A substantial increase in the amount and a great improvement in the quality of institutional care for children, particularly for those with behavioral and neurological disorders and for those mentally retarded.

--A great increase in the amount of foster care and an improvement in the quality through increased compensation for foster parents and through the training of foster parents.

--A much needed improvement in the quality of foster care through the training of prospective foster parents concerning the emotional needs of infants and young children and concerning ways to stimulate the development of their potential for competence.

--A great increase in the facilities for temporary group-care -- including both day care for infants and extensions of Head-Start like programs for very young children from 2 to 5 years of age. This would include the support of such facilities in the Centers for Children and Parents recommended in this Report.

--Support for State and Community experimentation with new models of foster care such as care of groups of four or five children varying in age.

--Support of increased staffing of child-welfare services to permit lower case loads, to permit supervision of foster homes, to permit planning for child placement and adoption, and to provide for trained child-welfare workers in each county in the United States.

No change in the existing state of affairs is more important than the passage of legislation to provide Federal matching of State funds for child-welfare services.

F. Start Training Staff for the Future

As the various recommendations of this Report are put into effect, tremendous increases in both professional and sub-professional personnel trained to work with young children will be required. As the Centers for Children and Parents move from the initial pilot stage to full-scale operation across the Nation to reach those 3,000,000 children under the age of 3 years who have been born to families in poverty, the professional manpower requirements, according to present standards, would be:

--12,000 additional pediatricians

--20,000 additional nurses

--120,000 professional child-care workers; including:

-administrators of Centers for Children and Parents,

-educationally oriented child-care specialists to supervise day-care and preschool facilities in the Centers for Children and Parents, and

-child-parent counselors to visit homes, to demonstrate new strategies of child-care in the homes, and to train and to supervise sub-professional workers in home visiting.

In addition, there is the need for sub-professional child-care workers. These must be increased from the existing miniscule number to approximately:

--1,125,000 sub-professional child-care workers to:

-serve as care-takers in institutions for exceptional children,

-serve as care-takers in day-care facilities for the very young,

-serve as workers in educationally oriented facilities for children from 2 to 6,

-serve as home visitors to stimulate the children of families in poverty and to demonstrate new strategies of child care and home-making to the mothers,

-serve as "teacher's aids" in kindergartens and in grades 1,2,and 3.

Some indication of the magnitude of the training task can be seen in the figures for pediatricians who are in exceptionally short supply. The pediatricians in the entire nation today number perhaps 14,000 -- or, depending on definition, maybe 20,000. About 500 new pediatricians become ready to enter practice each year. The additional 12,000 that will be needed to mount a full-scale program of Centers for Children and Parents would be equivalent to the entire annual increase of 500 a year for the next quarter of a century!

The Task Force realizes that it may be necessary to "make do" with less than the ideal of trained manpower for work with children. Yet, there is no alternative to a quantum increase. If we are to achieve this increase in trained workers, we must change present patterns of training. Methods must be developed to train a large corps of persons in relatively inexpensive fashion and in a short period of time. The strategy required to produce this quantum increase in personnel without undue sacrifice of quality will require attack on several fronts:

--increasing substantially the number of persons in the health and welfare professions trained specifically to work with young children and their parents,

--developing and supporting new kinds of training for persons to serve at the professional level as administrators of Centers for children and Parents, as the supervisors of group-care facilities, and as child-parent counselors or home visitors,

--developing methods and the patterns of cooperation between academic institutions and Centers for Children and Parents for the training of sub-professional child-care workers of the various kinds,

--developing methods of enlisting the participation of parents, older children, and volunteers and methods of training them for part-time work with children,

--increasing the number of persons prepared to do research on children's development and to innovate and to test the effectiveness of improvements in methods of fostering the development of competence and motivation in infants and young children.

To increase the supply of professional personnel equipped for work with children, the Task Force recommends:

--increased funding of support for existing programs of training for all the professions and investigative disciplines concerned with children's development under the Public Health Service, including:

-expansion of support for traineeships for students in diploma schools of nursing to become public-health nurses,

-expansion of support for traineeships for students of psychiatric social work,

-expansion of support for traineeships for graduate students of psychology for specialization in development psychology and in child-clinical psychology,

-development of support for traineeships for graduate students of social anthropology for work with families,

-development of support for traineeships for graduate students of sociology for specialization in the sociology of the family, and

-expansion of support for residencies in child psychiatry.

--greatly increased funding of the existing programs of support for the training of pediatricians and nurses under the Children's Bureau, for example:

-an increase of $3 million in funds to support an additional 500 pediatric residencies each year to attract this number of graduates of medical schools from other, less-needed medical specialties into pediatrics and thereby double the number of pediatricians entering practice each year.

-an increase in the funds for traineeships for graduate nurses to attract them from other, less-needed branches of nursing into children's nursing.

--the enactment of legislation, already supported by the Administration for the training of social workers.

--ammendments to authorities for teacher institutes and graduate teacher training programs in the Office of Education to include preschool teachers and an expansion of the funding of support for grants for this purpose.

In order to make available immediately the professional personnel required to launch at a pilot level the program of Centers for Children and Parents, the Task Force recommends:

--that a portion of the funds appropriated for grants for Community Commissions for Children and for Centers for Children and Parents be set aside for short-term training institutes, conferences, and workshops to supplement the existing knowledge of professionals in the domain of early child development, and especially that knowledge relevant to fostering the development of competence.

Such short-term training may be especially useful for women who, after years of full-time homemaking and child-rearing, are interested in returning to professional work. Many college-trained women who have reared families might be trained rapidly for various professional responsibilities even though they had originally no professional training.

In order to develop a supply of sub-professional child-care workers who are adequately selected and trained to foster the development of infants and young children, the Task Force recommends:

--that the new Federal Office of Children, proposed above, be given responsibility for devising ways in which Federal grants for Vocational Education and for Community-Work training can be used to train sub-professional child-care workers for the various kinds of work suggested in this Report,

--that this new Federal Office of Children be given responsibility for developing patterns of collaboration between the Centers for Children and Parents and the schools --junior high schools, high schools, and community colleges or teachers colleges-- for the training of sub-professional child-care workers, and

--that this new Office of Children also be given responsibility for setting and maintaining proper standards for such sub-professional training of child-care workers.

In order to facilitate the training of personnel for work with children and their parents, the Task Force recommends:

--that new legislation be enacted to provide funds to support the development of curricula and techniques for the training of new professions for work with children and parents. Initially, people trained in child development in departments of education, home economics, nursing, or social work and especially those trained in nursery education must help in developing the programs of the Centers for Children and Parents. Pilot programs of innovation in training people for the professions of Home Visitor and Child-Parent Counselor, with appropriate tests, should lead soon to new curricula that would require at most two years, and, hopefully, no more than a year of training. Funds for these programs should be made available in the grants to the proposed Centers attached to Universities for research, developmental innovation, and training.

Finally, in order to increase the interest of youth generally in work with young children, the Task Force proposes:

--the attractive possibility of establishing a Growth Corps. The Growth Corps might be a group somewhat similar to the Peace Corps in patterns of recruitment, training, and service. Such a Corps would be especially appropriate for college-age individuals, but might also include active people in retirement who are especially fond of children and who have the energy, patience, and understanding to work with them. Members of the Growth Corps could work in the Centers for Children and Parents in jobs requiring but a limited degree of training. The Growth Corps might well be made a part of the VISTA program.

G. Research and Development for the Children of the Future

Investigations in the biological, behavioral, and social sciences conducted largely during the years since World War II have assured us of the great importance of environmental circumstances during the prenatal months and of the early post-natal years for later child development.

The knowledge in hand about early child development is sufficient to provide confidence that immediate and extensive efforts to equalize the disadvantages of the young children of families in poverty can be effective. On the other hand, were the breakthroughs realized, they would almost inevitably increase the effectiveness of these efforts.

In order to continue and to increase activity within the existing pattern of investigative effort concerned with early child development, the Task Force recommends:

--that increased funding of Federal support for all kinds of research concerned with child development be provided.

This increase in general support for research in early child development should go to existing facilities for research--to universities, to medical schools, and to the various research institutes--through existing Federal agencies for awarding research grants in the Children's Bureau, in the National Institute of Child Health and Human Development, in the National Institute of Mental Health, in the Office of Education, in the Office of Economic Opportunity.

Communication and coordination among these Federal agencies in the awarding of research grants relevant to the development of children is highly desirable. Moreover, these several mechanisms deserve critical examination which should be under the direction of the Executive Officer of the new Office for Children. To this end, the Task Force recommends:

--the establishment of a committee, to be chaired by the Executive of the new Office for Children, to examine existing programs of Government support of research and development for weaknesses, to advise on the priorities in the use of Government funds for research and development in the domain of early child development, to foster communication among the various review committees that pass upon applications for research funds, and to consider and advise on general strategy.

This committee should be composed of two kinds of members. One kind should consist of representatives of the staffs of the various Governmental agencies making grants for the support of research and development. The other kind, numbering from five to seven, should come from outside the Government services. They should be persons both highly competent and highly familiar with various parts of the research and service technology related to child development. This committee should consider various devices for effecting communication and coordination.

One device would well be critical syntheses of the investigations and attempted innovations within the various disciplines and agency programs. The committee should have special funds with which to contract for or to give grants for these critical syntheses. Active investigators and innovators seldom read widely. The more the investigator or innovator is involved with his own work, the less widely he is likely to keep himself informed. In consequence, the cross-fertilization which comes from combining information from various kinds of investigative sources is often slow to materialize. Critical syntheses could well hasten the process.

A second supplementary device for fostering communication and coordination, without interfering from the top with the independence of investigators, would consist in arranging meetings about once or perhaps twice a year among the chairmen and the executive officers of the various study committees who review applications from investigators, judge their worthiness, and provide the priorities. All too often the "band wagon effect" of popularity for certain problems or for certain methods of attack influences the judgment of reviewers and leads to useless duplication of the investigative effort supported by the several Federal agencies without knowledge either within the personnel of these agencies or among the members of the review committees from universities and extra-governmental research institutes. Moreover, certain innovations may be tried and shown to fail over and over in the programs supported by these several mechanisms without anyone appreciating the increased certainty that comes from what amounts to replication. Yet again, the suggestive value of the success of innovations may go by without recognition unless their success is replicated. Meetings of the chairmen and the executive officers of the various study committees reviewing applications for research grants relevant to child development could, thus, serve a very useful communicative function. The chairmen of these study committees represent investigative personnel from outside the government service. The executive officers represent the various Governmental mechanisms. Meetings of the two combined should be especially fruitful in improving the judgment of review committees and in improving communication among the bureaucratic mechanisms at an effective, near-operational level.

The Need for New Patterns

The Task Force is concerned, however, not only with existing children, and not only with the children of the poor who need immediately whatever aids to their development that can be made available. We are concerned also for the welfare of all children and of the children of the future.

Probably no culture and no society has ever realized the full hereditary potential of a large proportion of the children who were born to develop in the circumstances provided. Probably few American parents of our day provide continuously those combinations of environmental circumstances that bring out the full hereditary potential of their children.

In the present state of our knowledge of child development, that which is least precise concerns those conditions required during the prenatal phase and during the years of infancy and early childhood to insure optimal development. Yet, as our analysis has already brought out (See II-E, pp. 73 ff), investigative effort is least in the domain of those environmental conditions which will best foster early child development. To a considerable degree, the paucity of this kind of investigative effort is a matter of lack of Federal support for it.

In order to increase the amount of the investigative effort concerned with fostering all aspects of early child development, in order to hasten the way to those breakthroughs that will improve our efforts to equalize the opportunities of the children of the poor more effectively, and in order to insure that all children of the future may profit from the work in the biological, behavioral, and social sciences, the Task Force recommends:

--that the new Federal Office for Children be provided with funds to support research on child development and especially to support innovations of new kinds of experiences to foster intellectual, motivational, emotional, and social development in infants and young children, innovations in helping parents to provide these experiences, innovations in the training of professional and sub-professional personnel, and investigations of the effectiveness of these various kinds of innovations.

Several kinds of innovative and investigative efforts are needed.

(1) Basic investigations of the ways in which early experiences influence later development. These basic studies would be concerned with the effects of exposing infants to various kinds of presumed enrichments of auditory and visual experience in the early months on their rates of psychological development and upon their later capacity to profit from various kinds of new circumstances. Do infants who have been provided with an opportunity to hear frequently the full range of language sounds begin to vocalize earlier than others who do not? And do infants who encounter such enrichments of auditory input during their early months learn to talk more quickly than do infants without the enrichments? These basic studies would examine the cumulative effects of successive attempts to enrich the circumstances encountered, for various recent investigations suggest that, properly controlled to allow infants to take or leave the enrichments offered, such attempts may not only hasten development of intellectual competence, but contribute significantly to the infant's joy of living.

Investigative evaluation of the effects of such attempts to enrich the experience of infants need to be concerned not only with immediate and short-term effects. They should also be concerned with effects that extend over a large part of the life span, from infancy to school age, and even from infancy to young adulthood. Only when we have studies of these long-term effects can we understand fully the nature and the meaning of early experience.

(2) Descriptive studies of the characteristics of children in families from the various cultural segments of our population. We need to know a great deal more than we do about how children living under the various cultural conditions of our varied society are brought up. Where, how, and with whom do they spend their time? What experiences and people influence their behavior and development--physically, intellectually, motivationally, emotionally and socially? Most of our existing knowledge is restricted to the children of white, middle-class, native-born parents who live near university centers. A highly useful exception to this statement exists in the social anthropological studies of the culture of poverty which Oscar Lewis (1961,1966) has been providing. Special funds should be provided for such studies, and to be most useful, they should be carried out periodically for the various social ethnic groups in the various regions of the country, much as the Census and the Consumer Price Index are carried out.

We also need descriptive studies of a retrospective nature of the life experiences and characteristics which distinguish between children from superficially similar backgrounds who turn out well and who turn out badly.

(3) Investigative evaluations of the effects of preventive and remedial interventions. A tremendous variety of investigations of the effectiveness of various kinds of preventive and remedial interventions need to be made:

--studies of the effectiveness of various techniques for influencing health and nutritional practices,

--studies of the effectiveness of providing opportunities for the observation of new strategies of child rearing as compared, for instance, with the effectiveness of counseling parents or sub-professional workers to use the new strategies, etc.

(4) Investigations of the effectiveness of various curricula and new techniques for teaching young children. Such investigations should concern themselves with such broad issues as:

--the relative effectiveness of structured approaches to teaching as compared with approaches which emphasize freedom on the part of the child to follow his own interests,

--the long-term effects of structured teaching during the very early years on creativity and motivation to achieve.

Such investigations should also concern themselves with narrower issues like:

--comparing the effectiveness of focusing on the teaching of specific linguistic skills missing in the children of the poor (See Bereiter, Engelmann, et al., 1966) with the Montessori method or with traditional kindergarten on later success in school,

--comparing the effectiveness of various combinations of visual and auditory media on later ability to learn, etc.

(5) Evaluative investigations of the effectiveness of various of the programs of the Centers for Children and Parents. Such investigations should focus on tests of the comparative effectiveness of well-defined innovations introduced into the programs of the Centers in experimental fashion so that at least pre- and post- measures can be made. These might well include:

--studies of the effectiveness of such innovations as dramatic films at coffee klatches for mothers on whether or not to use family planning methods or requests for supplies as compared with the typical illustrated lectures,

--studies of the effectiveness of various approaches to getting modifications in parental strategies of child-rearing,

--studies comparing the effects of providing enrichments of auditory and visual experiences mechanically during the first year of life compared with the effects of providing them with direct human contact, etc.

It is unlikely that such innovations and investigations of child-rearing practices can be obtained through the existing patterns of support and research planning. What appears to be needed is the support to establish Centers for Children and Parents in various kinds of populations near universities where faculty from several investigative disciplines are already concerned with various aspects of early child development. In such innovative-investigative efforts, it is important to have collaboration not only among representatives of the chemical, biological, behavioral and social sciences, but also between representatives of these various investigative disciplines and those who give educational, medical and welfare services. Only as such collaboration becomes effective can the picture of child development and the multiplicity of factors controlling it approach wholeness.

Believing that it is essential to combine basic research and investigative evaluation with efforts to innovate new combinations of circumstances with which to foster early child development, new ways to help parents in learning to provide these circumstances, and new ways to train both professional and sub-professional personnel for services to children and parents, and to combine both of these kinds of effort with the training of high-level personnel for research and innovation, the Task Force recommends:

--that Federal funds be made available through the new Office for Children to establish approximately 10 Centers for Children and Parents attached to universities in communities with various kinds of populations.

All kinds of research and innovation and training would be carried on in these Centers attached to universities, but the Centers would be expected to give priority to demonstration-experiments with innovations to foster child development, to remedy defective development, to help parents to provide development-fostering experiences for their children, and to train personnel. These Centers would also be expected to provide an occasion and a place for the necessary collaboration among investigative disciplines to obtain maximal leverage on a wide variety of problems.

Training Scientific and Professional Personnel.

These Research-and-Development Centers attached to universities would have not only investigative and innovative functions; they would also be facilities for the development of curricula for both sub-professional and professional service personnel (See III-F, pp. 141-142), and they would be facilities for the training of the highest level of personnel for the scientific investigation of early child development and for the innovation of new combinations of circumstances to foster child development.

Funding

The appropriate level of funding for a national program of approximately 10 such Research-and-Development Centers attached to universities would depend upon the size of the total program and the balance of basic, descriptive, and innovative-demonstration activities undertaken. Where the operations encompass research, training and the innovative-demonstration activities, it is likely that a reasonable minimum might be approximately one million dollars a year for each Center.

One of the problems in Federal funding today for combinations of research and innovations of service activities is that the various Federal agencies have differing types of enabling legislation. The National Institute for Child Health and Human Development, for instance, can provide funds for basic research but it cannot fund demonstration-experiments to test the effectiveness of service innovations. On the other hand, the Office of Education, the Office of

Economic Opportunity, and the Children's Bureau have enabling legislation that permits them to support demonstration-experiments with service innovations. It is currently difficult for the investigator to arrange support for a combination of the two sorts of activity. Creating a means for cooperative funding by several of these Bureaus with differing enabling legislation would help to provide funds for such comprehensive research and development Centers on early child development as the Task Force recommends.

Every effort should be made to coordinate the plans for the Research-and-Development Centers for Children and Parents attached to universities with the plans now being made by the Office of Education for a National Program for Research and Development in Early Childhood Education. This latter program, if it is funded as is now anticipated, may well be a smaller operation than the one proposed in this Report. Moreover, its efforts will be more narrowly focused on education in the preschool period and will not be concerned with such factors as those

> --prenatal maternal health, family planning, infant-parent relations, day-care for infants and very young children, helping and teaching parents to provide development-fostering experiences, and neighborhood organization of welfare services--

recommended for the Centers for Children and Parents in this Report.

Research Facilities.

Extensive construction of research facilities for research in the behavioral sciences is underway. Nevertheless, with the rapid expansion of efforts in research and innovative development in these sciences, facilities become overcrowded between the initial planning and the time the buildings are placed in service. For this reason, it will be necessary to provide funds for a major increase in facilities for the Centers program for research and innovative development in early childhood proposed here. The

Task Force suggests that such a program should have as one of its components the construction of appropriate facilities. Because of the nature of the funding practices of universities, both State and private, it is unlikely that matching of funds on a one-to-one or even a two-to-one basis will be feasible. For this reason, the Task Force recommends:

--that the funding of any buildings for the Centers for Children and Parents attached to universities be on a basis of three-to-one, with the Federal Government contributing at least 75%. An even more appropriate matching ratio for funding might well be nine-to-one.

In terms of procedures for the funding of such facilities, directional precedents may be found in the programs of the National Institutes of Health and of the National Science Foundation for the construction of facilities. Their procedures should be examined for guides for planning the development of facilities for the program of research and innovative development in early childhood.

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The program envisaged in these recommendations will enable America to honor her traditional values by utilizing what we now know toward an immediate effort to equalize the opportunities for early development in the children of the poor. The program also looks toward improving the quality of American life in the future by enlarging the efforts of research and innovation of better ways to foster fully the development of the Hereditary potential of all children.

APPENDIX I

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